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ART. I.—*Post-mortem Researches.* By BENNET DOWLER, M. D., of New Orleans.

[The reader will excuse the references to dissections not yet published. A want of time to copy from my MSS. in folio volumes must be my apology for using the scissors, instead of the pen, in collecting the detached portions from which I have patched this article into its present form. For a part of the dissection, on which the paper is founded, I am under great obligations for assistance, to the following gentlemen: Dr. Wederstrandt, Resident Physician of the Charity Hospital; Messrs. Saunders and Bates, resident students of the same; Drs. Osborne, Young, Luzenberg, and Nicholson.]

When in the course of medical inquiry, we meet with dogmatism on the one hand, skepticism on the other, and uncer-

tainty every where, we cannot do better than to appeal at once to the decisions of post-mortem anatomy, which, though they may fail in settling some points in dispute, will deceive us in none, and satisfy us in many. One author asserts, that there are one hundred and fifty fevers; another, that there is but one. What Goëthe says of the satirical poet, is applicable to the medical controversialist, who surrounds himself with a "dazzling fence of logic," and is eager for the conflict—"When I have called the bad, *bad*, how much is gained by that? The man who would work aright must not deal in censure, must not trouble himself about what is *bad*, but show and do what is good."

The book of Morbid Anatomy, though written by Nature, is a book of knowledge to those only who read patiently, and interpret its language truly. Pride and self-sufficiency, alone, will deride and decry this modest, safe, though laborious mode of investigation. It was a homely but just saying of one of the reformers, that every man carried a Pope in his belly. There is, however, one panacea for the cure of medical infallibility, which is this: let a practitioner, of this class, carefully dissect fifty or more persons treated by himself, or by another; let him estimate the blunders he has committed—blunders, that an accurate knowledge and a careful examination of the land-marks of disease, might have prevented! and, though his stock of pathological fiction may be diminished by this process, he will lose nothing valuable. Romance will be re-placed by reality. The piratical maxim, "that dead men tell no tales," is erroneous; they are the best witnesses.

To say that morbid anatomy throws no light upon medical treatment, is an admission flattering to empiricism, unjust to our science, fatal to investigation, opposed to truth, and at best, an indirect attempt to excuse professional indolence. Some may think that the following quotation from an able writer is too sanguine in its anticipations; but, what good can we derive from despair? "The time cannot be far off, when the term fever must be entirely discarded from our books,

and diseases named according to the tissues which they implicate. Then, and not till then, can it be expected that the laws of deranged action will be properly interpreted, or fully comprehended. All diseases, I feel confident, will ultimately be found to have a local origin and habitation. The artificial nosology of Sauvages, of Hoffmann, Cullen, &c., has had its day." (Prof. Gross' Path. Anat. vol. i, p. 30.)

It is, perhaps, true, that pathological anatomy is in advance of therapeutics. Both are in a state of infancy. The sooner we learn the true position of the enemy, the better.

The sentiment which Boswell makes Johnson utter concerning his opinions, applies but too often to the physician: "I don't like to have any of my opinions attacked. I have made up my faggot, and if you draw out one, you weaken the whole bundle."

NUMERICAL AGGREGATIONS, NUMERICAL ANALYSES, NUMERICAL AVERAGES, promise results, which, though less certain than mathematics, less poetical than speculation, will, with every succeeding generation, approach nearer to perfection. The amount of labor by this method, for a single individual, would be absolutely appalling to the most ardent imagination; "but many hands, make light work." The book of symptoms, the book treatment, the book of morbid anatomy, remain to be written upon this statistical system. To count correctly, to overlook nothing, to observe philosophically, is a heavy undertaking, more especially as the chaff and the wheat, the ore and the dross, must often of necessity be collected at the same time: the laborer cannot always pre-determine which are the essential pathological facts, anterior to results, since these are the objects of his pursuit, and are not, as yet, supposed to be fully appreciated and known. A few facts, however correct, cannot be relied on for establishing general results, or principles. Analysis is the ordeal which tries his materials, and consumes the uselesss. Even if he discover nothing new, he confirms what was discovered before, and shows its proportional frequency, order, and connexion with

other events. The NUMERIC METHOD, is something better than the EASY METHOD, CONJECTURE.

A more extraordinary statement than that of Louis was scarcely ever made, by a cultivator of medicine whose experience had been very extensive: "he says at the close of his labors, when he submitted *all* his facts to the unerring test of arithmetical analysis, *that in every instance were the a-priori conclusions which he had formed from the recollection of his own facts found to be erroneous.*" The import of this statement seems to be, that all systems of medicine, except the ARITHMETICAL, are more likely to prove false than true, upon analytic examination.

In order to test this apparently absurd, and paradoxical principle, I spent considerable time, for several successive days, in examining the tongue alone, in persons in all stages of yellow fever, writing down the appearances at the bed side, in the charity hospital, during the epidemic of the year 1841; and, though I had been extensively engaged in practice during several epidemics, and had written many cases, which I have not to this day analysed, yet I found my previous opinion had been erroneous, so far as the cases above mentioned afford a rule by which to judge. I had supposed, from memory, that the tongue of most persons affected with this fever, had some well marked morbid appearances. But, though some were found to be red, some white, some pointed, some tumid, some dry, &c.; yet, *the majority were natural.* I am far from thinking that memory, when tried by the mere test of arithmetical medicine, will prove generally thus treacherous, or that the cases above mentioned are sufficient to prove, in most cases of yellow fever, that the tongue is healthy.

NUMBER, as an element in working out results, is a safe guide, only so far as its facts are accurate, pertinent, and essential. In morbid anatomy, which is, in connexion with symptoms, the foundation of correct treatment, these are all important, otherwise, we must fall into errors the most fatal

under the imposing array of STATISTICS, and MEDICAL MATHEMATICS. AGGREGATIONS may be true, and yet of no value.

The object of this paper is, therefore, to notice some of the *difficulties*, *errors*, and *modifying circumstances*, incidental to a just appreciation of morbid appearances, some of which have been often overlooked or misapplied. The numeric is eminently a false method, when its facts are inaccurately stated.

The *sooner* post-mortem examinations are made, the better. This matter we will illustrate as we proceed. The French writers, who excel in pathological anatomy, have not, certainly, overlooked the great changes that take place in the body within thirty-six hours after death. If they have erred it is in overcharging the picture. But in this, as in some other cases, their knowledge is in advance of their practice. Andral says, that, "in almost every body, opened at about thirty-six hours after death, reddish effusions are found in the cavities, red ecchymosed spots in the great cul-de-sac of the stomach," &c. (Path. Anat., vol. i, p. 49.) And yet, strange to say, this is about the average period, for post-mortem examinations, among the most eminent French pathologists; a fact which throws no little obscurity and doubt, over the results of their numerous observations. Open almost any of their works, and it will be seen, that their autopsies have been delayed from twenty-four to forty-eight hours after death. Louis, in his work on consumption, records fifty-one cases in which the period of the dissection is mentioned, making an aggregate of fifteen hundred and five hours, affording an average to each case of more than thirty hours; his other works, will, I suppose, give about the same average, except his book on the yellow fever of Gibraltar, which gives fifteen.

If I am not much mistaken, the celebrated Broussais *never* mentions the period of his post-mortem examinations at all. In Cook's Morgagni, the same omission is almost constant. Bertin's work on the heart, approved by the Academy of

Medicine, has thirty-three dissections, the average to each being nearly twenty-nine hours after death.

Rilliet and Barthez, on the pneumonia of children at Paris, record a number of examinations, none sooner than twenty-eight hours, and some as late as forty-four hours. In Billard's interesting work on the diseases of children, the period of the numerous dissections is not mentioned with any precision, except in two or three cases. He often says the dissection was performed next day. Now, this may mean seven or eight hours, or it may mean nearly two days. A person dying at 10 o'clock, A. M., may be examined the next day at 5 or 6 o'clock, P. M., forty or forty-one hours after death. Though fractional parts of an hour may be of no importance, even in hot weather, yet, when the dissection is delayed two days, as is often the case with these and other authors, many conflicting elements conspire to efface appearances that existed at death, or to create others, simulating anatomical characters of diseases which did not exist.

Out of one hundred and fourteen yellow fever dissections, not to mention others, a large number were made, or at least begun, from five to ten minutes after breathing ceased, before cadaveric injection, permeation, congestion, and exudation, had time to cause any alteration; hence, it may be inferred that the exact condition of the organs is truly reflected.

I have caused the body to be placed on its right side, for example, immediately after death, both in the night, when the air was cool, and in the day, when it was warm, and in from three to six hours, have observed that the upper or left side was comparatively bloodless, while the lower was loaded with blood externally and internally; the intestines being finely injected, and much reddened, in such dependent parts as were most favorable for the influence of gravitation. (Dissection XLIV.) But dead bodies differ very much from each other in their susceptibilities to cadaveric infiltration. Death, in the common acceptation, may, and often does, take place hours before the body dies in a physiologi-

cal sense. Volition, thought, sensation, respiration, and the heart's action have ceased, and for all the purposes of existence, life is no more; but it does not hence follow, that all the vital actions are extinct; both animal and organic life may exist in many cases. As a proof of this, muscular contraction and capillary circulation, which these dissections fully establish, might be mentioned.

As MUSCULAR CONTRACTION, after apparent death, is not known to exert a modifying agency over the morbid appearances, it is referred to here, merely as confirming the doctrine of capillary circulation, as surviving that of the heart and large arteries—a doctrine, which if true, renders tardy dissection a most fallacious guide in judging of venous congestions, vascular turgescence, organic reddenings, blanchings, &c.

The precise boundary line between life and death, is dubious and undefined, and the dissector cannot commit a greater blunder than to wait for the work of putrefaction, or even post-mortem infiltration, gravitation, &c.

According to my observations, muscular contractions, after death, are more common in the yellow fever subject than in any other class of fever victims.

A slight scratch with the back of the knife across the course of the muscular fibres, in any part of the body, causes the muscles to contract, and to swell into firm ridges exactly at the line of mechanical irritation. The summits of these elevations are sometimes an inch above the surrounding level, with bases of two or three inches in diameter, the muscular fibres assuming zigzag, wavy lines, until they relax into repose again.

Observe the arm as it lies extended upon the table, supple and relaxed—we strike it with a horn, a cane, or metallic rod, a conductor or non-conductor of electricity, either on the skin or on the naked muscle—contraction takes place instantly, or sometimes slowly: for example, we strike the biceps muscle, about its middle—the arm is bent, the hand, perhaps, strikes a violent slap against the face, or rises more

slowly with an uniform motion pointing to the zenith, and then gradually falls back from the perpendicular to the horizontal position. This operation may be repeated for several hours, in some cases just so long as the muscular contractility remains unimpaired. In some subjects, this property does not exist, and it varies in different parts of the same subject; the masseter muscles lock the jaws firmly together, in some cases before death, oftener just after; the recti and other abdominal muscles, in a few instances, become rigid in like manner, while the fore arm bounces from the table after every blow given even by the fist of the operator. When the rigidity of the entire musclar system exists, this property is lost; but where the entire body is supple, it does not follow that the power of post-mortem contraction is always present. It exists in the fibres of the heart, but is seldom sufficient to move the whole organ.

Examples might be multiplied were it desirable; the fol lowing are supposed sufficient for the present occasion:

E. M——: (Dissection XCII.) A stroke on the arm between the shoulder and elbow, caused the fore arm to rise from the table, and after continuing perpendicular about a quarter of a minute, it slowly fell back to the horizontal position. During the period that the arm continued elevated, the muscles where the blow had been given were contracted into a ridge, which, gradually sinking, the arm fell down to the level again. These experiments were often repeated with the same results; other muscles, in different parts of the body, jerked or contracted when scratched or irritated.

O. S——: (Dissection XCIV.) This subject when struck, as in the last case, contracted his arm strongly, sometimes holding it up a minute after the stroke. The experiment was repeated for several hours.

Not wishing to enter upon the subject of the capillary circulation, only so far as it may exert a modifying influence over the post-mortem appearances, I may however be permitted to say the following facts prove that the direct action of the heart, and its indirect, or suction power, joined to the suc-

tion produced by respiration, are not necessary to the rapid motion of the venous blood.

It has been observed by dissectors, that, in the dead body the left side of the heart and all the great arteries are generally found empty. Now of all conceivable facts, this is precisely the fact which ought not to happen, upon the theories which are usually brought forward to explain the capillary circulation. We might, on the contrary, expect to find the left side of the heart and arteries distended, the veins empty. It is erroneous to say that the heart and arteries possess a contractile power, which, after death, expels the blood. We have but to look into the body to see the arteries, not collapsed but hollow, not contracted but large, not gorged with blood during the last moments, when the heart is no longer able to impel it onward. Considering the emptiness of the arteries, it is surprising that they do not contract or collapse completely when exposed to the pressure of the atmosphere, without counteracting distention from blood within their calibres. Moreover, the circulation of chyle by the lacteals, and of lymph by the lymphatics, cannot be accounted for by the heart's action, directly or indirectly.

I had not proceeded far in the yellow fever dissections, in 1841, before several cases of rapid and copious hæmorrhage took place from incisions in the scalp for the purpose of removing the skull-cap, and from incisions in other parts of the body. The quantity of the blood, the force with which it was discharged, and the elevated points from which it flowed, all indicated a power greater than gravitation as well as essentially different in its mode of operation.

F—— P——, aged nineteen, was, about fifteen minutes after death from yellow fever, placed on an inclined plane, the head being the highest part of the body. An incision, beginning an inch above the eyes, and continuing around the head, at the same distance above the ears, discharged, from the forehead, temples, and other parts, one pound and a quarter of blood, in about fifteen minutes: on

removing the skull-cap and dura mater, without wounding the brain, the same quantity flowed in half an hour, natural in color, coagulating as in health. (Dissection XXI.)

The body of a man aged thirty, two hours after death from yellow fever, was placed upon the dissecting table, the head being the most elevated part; a circular incision, made an inch above the ears, discharged in half an hour from sixteen to eighteen ounces of good colored blood, which formed a coagulum of good consistence. (Dissection XX.)

A young man, ten minutes after death from yellow fever, was placed on a table, as above; the brain was quickly removed, and in a few minutes after, about twenty-four ounces of blood flowed from the vessels of the head. The blood was of a good color and coagulated firmly. (Dissection XVIII.)

L. B——, aged twenty-one, immediately after death was placed on the dissecting table, the body being very warm and the veins full: the chest was quickly opened. Dr. Young, of this city, who assisted in the dissection, thought he discovered a slight movement or contraction of the heart. The subclavian vein was opened at about the middle of its course. From the orifice the blood shot up two or three inches, an elevation greater than any part of the body, running with such force as to appear like a vital action. From three to four pounds of good colored blood, clotting as it cooled, were discharged in about half an hour. (Dissection LVII.)

G. J——, of Pittsburgh, aged thirty-two, in one hour after death, discharged from an orifice in each jugular, made by Mr. Saunders, student of medicine, eight pounds of healthy blood, according to the estimation of several medical gentlemen. At first the blood shot out some distance. In the second and third hours after opening the veins, about twenty ounces more flowed, before opening any of the cavities. The muscles, which were of extraordinary size and beauty, possessed contractility for several hours. (Dissection LXVI.)

In the case of J—— B——, of L———, the post-mortem blood-letting was nearly as profuse as in the above. (Dissection LXII.)

J—— C——, aged thirty-four, about five minutes after death presented the following evidences of capillary circulation:

The veins of the neck and extremities were prominent. A vein was opened in the left arm—the blood flowed copiously, and jetted freely, on moving the muscles. On passing a ligature around the right arm, as for ordinary blood-letting, the veins became more prominent; one being opened with a lancet, the blood shot out as in the living subject to the distance perhaps of eighteen inches. The left jugular was immediately opened, from which the blood flowed freely, but without jetting; and in an instant after, the abdomen and chest were exposed, by a rapid dissection. One of the branches of the coronary vein of the heart, upon its most elevated part, was punctured, and though this twig was not larger than several others which were distributed upon the hearts' surface, yet, in a few minutes, (ten to fifteen,) it discharged one pound or more of blood. The omenta, mesentery and other viscera, had their external veins beautifully and equally distended. The hollow veins being cut, from three to four pounds of blood accumulated in the cavities, forming good clots.

Without anticipating the appearances of the brain in this case, I may remark, that it was examined last, and though the veins were numerous and large in its envelopes, yet they were nearly empty, owing, probably, to the previous discharges by the decending cava. (Dissection LXXI.)

E. M——. About an hour after death, the veins being distended, blood-letting was performed in the arm, in the usual manner, but without a ligature: the stream was of good size, and shot up, falling in an arch of four or five inches in diameter at first, but, gradually diminishing, it ran down the skin of the arm, amounting in about thirty minutes to nearly as many ounces, though the arm was elevated above any

other part of the body—it was also lowered—the abdomen and chest were opened—the heart was pressed; but, all these changes produced none upon the stream, which, becoming weaker and weaker, at length ceased. The right side of the heart was greatly distended; and the coronary veins upon the highest surface of the heart, when punctured, shot out blood freely. This subject retained the power of muscular contraction for hours after death. (Dissection XCII.)

O. S——. On incising the scalp, the blood ran chiefly from the forehead and temples, in a double stream, uniting into one, upon the back of the head, nearly as large as a goose-quill, and in a few minutes, amounted to about one pound: on removing the skull, without wounding the brain or its inner envelopes, a like quantity was discharged, with still greater rapidity. It happened, accidentally, during dissection, that the ligature and compress were removed from the orifice of the vein in the arm, from which, five days before, he had been bled—the blood spouted forth spontaneously, at first in a good stream, gradually diminishing to a slow dropping in thirty minutes. The orifice was un-united, and had a dark color which extended to the surrounding tissue, not less than two inches.

In this subject, muscular contraction continued for several hours. (Dissection XCIV.)

The following case, by some called yellow fever, by some congestive, but which perhaps is not referable to either, is very remarkable:

J—— M——, died, from a fever which lasted twelve days and a half, and was carried directly to the dissecting table—every part of the body was, as far as I could judge, without a thermometer, hotter than in health, appearing to my touch, nearly as hot as in *solar asphyxia*. The febrile smell was very offensive, as in the living body, in the most malignant fevers. The skin was very white, the tongue moist and pale. The external veins, especially those of the arms, were distended, as in health after exercise. Two were opened. The blood flowed rapidly, projecting several inches, and, after-

wards, more than a foot, by the aids of compression and the movement of the muscles of the arm. As the blood cooled, a coagulum formed, having a consistent fibrinous, semi-transparent coat. The cavas discharged about four pounds of blood. There was no cadaveric hyperæmia. The anterior, as well as the posterior walls, and viscera of the cavities, were alike supplied with blood. The brain, which was examined last, had but little blood, though its vessels were much developed, dilated, and moderately distended with air bubbles, like the effervescence of soda-water or soap-suds.

About one hour after the body was placed on the table, a free, warm sweat appeared, first, in drops upon the face and neck, and then, extended to all parts of the body. The weather was mild and pleasant. The cadaveric heat, the hot copious perspiration, and the external venous distention, afford strong contrasts to the condition of the living body during congestive fever.

Had this body remained unopened one or two days, what would have become of all this blood? To say nothing of cadaveric injection, and exudations, the transporting power of the capillaries might have deposited the blood in new situations, sponging it out from structures that had suffered during life from acute hyperæmia, engorging others that had been healthy; blanching the former, reddening the latter. At the right side of the heart, venous stagnation probably begins, and its vessels being wholly passive, it travels outwardly towards the extremities of the veins; the capillary power is soon neutralized by an opposing mechanical force, or ended by the entire cessation of vital action.

Since CADAVERIC GRAVITATION aggravates some morbid appearances, removes others, and may observe or change all; and since the capillary circulation may survive the heart's action, and thus, being no longer balanced by supplies from the central fountain, may, in a few minutes after death, remove morbid accumulations, depositing them in the great veins or elsewhere, surely it is important to make post-mortem examinations as soon as possible.

Unusual and protracted HEAT of the body after death, is, I am inclined to think, a presumptive proof that the capillaries are more or less active at the time.

My reason for dwelling so long upon this subject, is, that pathologists have not, so far as I know, adverted to it with a view to apply it to post-mortem appearances. Its physiological bearings do not fall within my design at present, and though I am not able to appreciate, fully and exactly, its modifying agency over morbid anatomy, yet others may be more successful in its application. Facts have not been sufficiently numerous for exact analysis.

Another fact which exerts a modifying power over morbid appearances, a fact which has been too generally omitted by authors, is the following: If the body be warm, the blood fluid, a morbid congestion in one cavity may be removed, or lessened, at least, in some cases, by severing the blood vessels leading to another, especially after an acute disease of short duration. Let the jugulars, or the cavas be cut, or the heart and lungs be removed; in an hour, or less, the brain and the abdomen may become more or less bloodless. Though the blood vessels may have been previously engorged, and their calibers dilated, now, they may appear in a very different condition, collapsed, and comparatively exsanguious. Again, let us suppose, that in two persons recently dead, we proceed to examine whether hepatic congestions exist. In the one case we open the abdomen; we penetrate the liver with the finger, or open its texture with the knife, severing its vessels; the blood wells up rapidly, several pounds may flow in a few minutes; engorgement seems to be present; and yet this happens when there is no congestion at all. In the other case, let all the great vessels be divided—let the liver remain in its natural situation, and let it be the last organ examined, and it will probably be found nearly bloodless; even its parenchyma may not indicate the previous congestion. Without regarding these circumstances, the former liver would be congested; the latter, bloodless or anemic.

COLD, alone, may perhaps remove morbid appearances, and

create mechanical congestions, by unequally condensing the solids and fluids of such parts as undergo refrigeration the most rapidly—congestions resembling morbid turgescency. Cold, acting on the superficial capillaries, and other vessels, may force the blood towards the centres, engorging the warmer, and more dilatable parts: even in the living body, cold, more particularly congelation, causes paleness or bloodlessness upon the surface, and of course sanguineous centralisation.

Difficulties, in morbid anatomy, result from our limited knowledge of the exact appearances of each structure, proper to the HEALTHY ANATOMY. Death, from almost any cause, whether from decapitation, hanging, drowning, asphyxia, or fire-arms, may change the healthy appearances, instantly, in many textures. The rarest dissections are those of persons, who have died from accidents, not connected with acute or chronic diseases. The natural vascularity of a part must be estimated, in order to judge whether there be an acquired or morbid increase of vessels: so of color, consistence, and magnitude.

In order to acquire just ideas of this branch of the inquiry, comparative anatomy is generally available. Some easy lessons may be had of the butcher, at the slaughter house, where different animals are killed, by different methods.

Over-nice distinctions which indicate no palpable differences, that millinary of morbid anatomy, retard and discourage the student.

For example, there has been much dispute about the precise color of the mucous tissue of the stomach. This organ is one of the most accessible, the easiest examined, one that has occupied beyond all others the attention of investigators; yet, there exists great difference of opinion, about the healthy appearance of its internal coat. "It has been described as being white, greyish-white, reddish, greyish approaching to yellow and red, straw-colored, &c. Billard, in whose opinion Dr. Hodgkin is inclined to place most confidence, states it to be *a dead milky white.* According to Buisson and Bichat,

the color is a deep red, and according to Sabatier and Habicot it is of a reddish purple and deep purple. Gavard, Boyer, Sœmmering, Chaussier, and Adelon, make it of variable shades between red and gray. Rosseau, who derived his opinion from the examination of the bodies of criminals dying by the executioner (by the gullotine we presume), states that the color of the gastro-intestinal canal *is white*, or rather faintly tinged with red. We are ourselves rather disposed to agree with H. Cloquet who describes the usual appearance of the membrane as being of a *reddish-white* and *mottled—comme marbrée.*"—(British and For. Med. Rev., April, 1841.)

The COLOR of the internal structures should be noted, soon after their exposure to the air. This is a matter of much importance, for in a few minutes after the removal of an organ from the body, it becomes red or roseate, owing not to disease, but probably to its imbibing oxygen gas. This acquired color is superficial, and by making a fresh incision into the solid viscera as the liver, lungs, spleen, brain, &c., some hours after exposure, the original color, as at death, will be observed without material alteration. After the frosts of October, 1841, this coloration appeared to take place with great celerity, and often it assumed a scarlet hue which might readily be mistaken for a morbid appearance, by one not duly considering the circumstance to which I allude.

Simple coloration, unaccompanied with structural changes, being so variable, is of small value, and is, at the same time, one of the principal sources of erroneous deduction in morbid anatomy. In not a few diseases, the lesions account for the cause of death, nearly as well as decapitation. It is better, in doubtful and unexplained cases, to acknowledge our ignorance at once, than indirectly to dodge the question, by refering it to slight discolorations, especially such as happen to the mucous tissues of the air-passages, stomach, &c., which, still more than the skin, are liable to be blanched, or spotted with reddish, purplish, and dark hues, from many different causes, besides the last agony. Seldom, if ever, do we see *vascular turgescence* or *redness* of the arachnoid, in the

most violent form of the disease called *arachnitis*, while nothing scarcely is more common than *opacity*, *thickening*, *serosity*, *sub-arachnoid* infiltrations, and especially fibrinous or lymphy exudations: the latter product, Professor Gross says, "is invariably of inflammatory origin (without our being able to detect the *slightest redness*, &c.)—a law than which none is more satisfactorily established in pathological science." (Path. Anat. vol. i, p. 59.)

CADAVERIC COLORATION, is the source of innumerable errors in those dissections, where that convenient, theoretical, and summary word *inflammation*, is vaguely used and much patronised. This term is like a sieve for carrying water. It may be necessary, in theraputics, as indicating a certain class of medicinal agents, but is not necessary in morbid descriptions, *mere descriptions*. In the dissection of those white, non-vascular, firm indurations, called scirrhus, I have had some experience, and still more in their treatment. In about one half of these degenerations of the mouth and neck of the womb, the recovery has been complete, by antiphlogistics, as absolute diet, position, local irritants, iodine, mercury and emaciating medicines, the residue ending in ulceration, and death. If the treatment furnish any guide, in judging what is, and what is not, inflammation, it would seem that this *white inflammation* offers an excellent type or starting point: the redness often found around white indurations may be accidental. But *whiteness*, *redness*, *blackness*, &c., do not become important unless all the circumstances of the case be regarded. In acute fevers in this city, the intestines, particularly the cœcum, colon, and rectum, are often as *white* as the breast of a boiled chicken, or as prepared tripe; and still oftener *contracted* to a round firm cord, scarcely larger than the thumb of the subject, and for several feet, so completely closed that the French intestinal scissors cannot be introduced without much force; the whiteness and contraction being the only alterations of the parts. Blackness of the intestines may indicate mortification, or nothing morbid at all beyond mere *dyeing*, as if it were a piece of cloth; black

vomit filling the bowels will sometimes, in from ten to twenty hours after death, *dye* all the tissues of the bowels black. Blood, according to its accidental hues, will in like manner dye them red, claret, mahogany, &c., without any changes of consistence whatever.

Mamelonation in its usual and most simple state, is a change, the pathological import of which is but little understood; though, as a matter of fact, it deserves to be noted. It consists of eminences much greater than those on the surface of the roughest orange, alternating with depressed lines upon the internal surface of the stomach, usually of a pale white color, though sometimes appearing like red granulations, at least such are its appearances in the victims of fever in this city. It seldom happens. Perhaps a kind of coagulating or constringing power in the gastric juice, or the spasmodic and irregular contractions of those strong, hair-like fibres and vessels, which compose the net work of the sub-mucous tissue, may give rise to this lesion, if such it may be called. Cold causes the skin to assume a slight mamelonation, called "goose-flesh;" alum, gall nuts, &c., causes the mucous membrane of the mouth to contract and form irregular prominences, apparent fissures, &c. Simple mamelonation, without changes of color, cohesion, vascularity, firmness, &c., is, in morbid anatomy, probably far less important than some imagine.

The quantity of morbid fluids is often great in yellow fever, causing much distention of some organs. B—— C—— (Dissection XXXVIII), female, of medium size, had, five minutes after death, besides six or seven ounces of cerebral serosity and indications of copious hæmorrhages from the uterus and vagina, about thirty ounces of blood effused in the pleural cavities, sixteen ounces of blood in the large intestines, and fifty-six ounces of intensely colored, heavy black-vomit in the small intestines, in all, about one hundred and eight or nine ounces: this coloring matter, in a few hours (to say nothing of a day or two), would have spread obscurity over the morbid appearances of the surrounding textures.

Cohesion, one of the most important and certain tests in morbid anatomy, becomes a fallacious guide, under some circumstances, chiefly from the effects of delay. If, for example, the muscles have lost their firmness and natural color and are becoming puffy, &c., what are we to expect but loss of cohesion in other textures, to say nothing of the action of the gastric juice upon the gastro-intestinal mucous tissue? The medico-legal testimony and pathological deductions, based on post-mortem examinations made many days after death, must in many cases be involved in great uncertainty. I may be pardoned for introducing here the following case as illustrative of the *progress of decomposition* in the various organs in this climate, inasmuch as it is interesting, I trust, in another aspect—showing that the stomach may be ruptured spontaneously without any previous indisposition.

It is proper to remark, in explanation of a circumstance alluded to in the following case, that while travellers facetiously call New Orleans, "the wet grave," its cemeteries are really such, excepting those which are constructed with vaults, costing from sixty-five to one hundred and thirty dollars each; the other cemeteries are situated a mile or more from the river, at the termination of the inclined plane, looking towards the swamps, in a dead level, the bottom of the grave being at about the same height as the low-water mark of the river, which circumstance, in connexion with heavy rains and the impossibility of drainage, keeps the graves full of water, so that bailing out a grave is necessary just before inhumation; and even then the funeral service which says, "dust to dust, earth to earth," sounds oddly, since the defunct is usually committed to the water. In the following case the weather, the position, &c., formed an exception, the bottom of the grave was made in firm, tenacious mud, and contained a stratum of water about two inches deep. Had this body been exposed to the air, instead of the humid grave, decomposition would have been greatly retarded. An opinion has prevailed, even in this city, that animal decomposition is unusually rapid in our climate. The contrary is the fact, unless humidity be

present. Humidity in this city is sometimes great and sudden, unconnected with rain, amounting almost to a shower within doors, owing to the fact, that the north and the south winds often meet suddenly face to face; a rapid condensation of moisture follows, without fogs however. But more generally dessication (from a powerful sun and brisk wind) prevails at least during autumn. We have extremes, but the drying property of our air is very remarkable, and to this cause I attribute the slowness of putrefaction which I have observed so often, even in hot weather. It appears that in some instances where moisture is excluded, the body does not putrefy at all. Several years since while engaged in collecting materials for the *grave-yard statistics of this city*, the sexton of the Catholic cemetery informed me that on opening a vault in the upper tier he found a body, long since entombed, completely dried or dessicated, without any signs of previous putrefaction: the hair and whiskers firm; the eyes and face though dried were of a natural appearance. Similar facts have been related by travellers in the east. "We observed, (says Captain Lyon in his travels in North Africa 1818–'19–'20,) many skeletons of animals which had died of fatigue on the desert, and occasionally the grave of some human being. All these bodies were so dried by the heat of the sun, that putrefaction appears not to have taken place after death. In recently expired animals, I could not perceive the slightest offensive smell; and in those long dead, the skin with the hair remained unbroken and perfect, though brittle." (Lyells' Geology, p. 119.)

Having been summoned by the coroner of the Parish of Jefferson, to make a post-mortem examination, before a jury of inquest, at the McDonald cemetery opposite New Orleans, a mile from the river, I proceeded to the place of disinterment, at 12 o'clock, M., October 1st, 1842; the weather being dry and moderately warm.

Previous History. H—— J——, a mulatto (whom I had attended some years before for gun-shot wound), aged thirty-five, resident in New Orleans for twenty years, stout, bony,

muscular, with but little adipose tissue, but always healthy—workman in the foundry at Gretna—at 8 o'clock, A. M., September 28th, 1842, after working as usual, ate his breakfast of beef-steak, potatoes, bread and coffee, abundantly—left the table, walked ten paces, sat down, placed his hand over his stomach, knelt down, said he was "devilish sick," the only words he spoke; his pulse became imperceptible, his skin cold; he was dead, fifteen minutes after finishing his meal; was buried the same day; and, by the order of the Judge, was disinterred for inquest seventy-six hours after death. Before reaching the coffin, cadaveric gas became intolerably offensive. The coffin was large, strong and apparently tight; the corpse, which was much enveloped in cloths—the head in bandages—filled the entire coffin, except that part corresponding to the legs. The coffin contained about one gallon of liquid, supposed to be an exudation from the body, being less fluid than water, having an oily, bloody, and turbid appearance; some of it had leaked out.

Corpse swollen, puffy; universal gaseous inflation of the cutaneous, cellular, adipose and muscular tissues doubling the size of the body, not excepting the extremities; integuments of the face and head from two to three inches thick, lips, ears, and eyelids, four inches; the neck, three or four feet in circumference; the scrotum, nearly two; the penis, one; muscles, bloodless and softened; great abdominal convexity from gaseous distention; foam issuing from the mouth and nostrils.

Head: hair loose; pericranium and dura-mater non-adherent, without much loss of tenacity; arachnoid and pia mater softened; brain like molasses or pus in consistence, being of a dirty gray or white color, with sanguineous tints in dependent parts; this description applies to the upper portion of the spinal marrow; the vertebræ were separable by the hand alone.

Chest: lungs, cohesion moderately diminished, color, gray, with redness in dependent parts, being greatly collapsed, occupying about one-sixth of the cavities; mucous tissues of the air passages reddish; bloody effusion, mixed with serosity,

about four pounds; pericardium puffy; heart thin, flabby, pale, nearly white, totally empty (as were its great vessels), and though its muscular tissue was effervescing with minute air bubbles, it was free from elasticity, being only about one fourth of the usual size; aorta, pleuræ, &c., nearly natural.

Abdomen: intestines distended, pale, bloodless, not tearing without considerable force, being moderately softened; the mucous tissue pulpy, and free from arborisations, &c.; the bile had infiltrated the subjacent tissues; the gall bladder empty, its coats puffy from gas; the liver was nearly natural in cohesion, elasticity and color; the stomach, small and attenuated, was *ruptured* about four inches along its lesser curvature, it contained about a pint of semi-fluid food; about the same quantity had escaped through the orifice (which was somewhat irregular, though longitudinal), and lay on the left side of the spine near the diaphragm, resting on a clot of blood as large as the hand. Here the examination stopped; other organs not dissected.

A few weeks before this occurrence I met with a case of *rupture of the stomach* in the person of T—— L——, aged sixteen years. (Dissection LXXVII.)

I may be allowed to remark that I never had any personal experience of the *injurious effects* of *animal effluvia in dissection*, except in the above instance. I have known some, who, though good operators on the living, have become sick or faint from dissection of the dead, even when unattended with any strong odors. In the case of J——, just related, a depressing nausea was produced, somewhat ike sea-sickness, which continued for twenty-four hours. Pain in the axilla, nocturnal fever, and tedious pustulations do arise from the smallest wound or scratch in dissection, the dangers of which, however, have been greatly exaggerated, if I might speak from what I have seen.

Gaseous distention of the tissues, though generally the effect of incipient decomposition, is not always so. I have seen it in five minutes after deaths the most rapid in bodies that appeared as free from all the appearances of putrefaction

as if they had died from a ball through the brain. It appears in the sub-mucous tissue of the stomach, in the blood vessels of the brain, in the cellular tissue of the neck, and in the heart.

In pathological anatomy, still more than in geology, difficulties arise in the chronological classification of strata; primary, secondary, and recent morbid formations, being often mixed and confused, their *eras* are uncertain.

As in weights and measures, so in healthy and morbid anatomy, *standards* of comparison are desirable. In these dissections, I have often in the absence of any known standards, endeavored to introduce some, though not very precise. Thus, when I speak of the *tenacity* of the arachnoid and pia mater, I mean that they may be peeled from the hemisphere and its depression entire, or nearly so, and that a strip raised on the handle of a knife from one to two inches in breadth, will be strong enough generally to suspend the half or the whole brain without rupturing.

With respect to hypertrophy or enlargement of the organs, they are compared with recollections and with the best descriptions of their size in a healthy state; thus, it is said, their dimensions are augmented one-third, one-half, twice, &c. All this is very inexact; precision is impossible. In different individuals the organs differ in size, in the healthy state. But is not such a standard better than none?

With respect to several of the *hollow viscera*, particularly the stomach, considerable thickness and contraction, or thinness and distention, may exist without necessarily implying any morbid change. An empty stomach is generally very thick, its mucous surface wrinkled, and full of fold or plaits; on the contrary, the presence of much fluid is attended with attenuations of its coats. By inverting this organ, and filling it with air or water, its sub-mucous tissue may be infiltrated by pressure, so as to become one or two inches thick resembling ecchymosis, oedema, emphysema, &c. This tissue is the seat of those arborizations, which have been so often erroneously ascribed to the mucous membrane.

I have not seen in this membrane well-marked vascularity that is, a net work of continuous trunks and branches, as in the conjunctiva, serous membrane, and other tissues; when the sub-mucous tissue has suffered denudations from loss of its mucous membrane by ulceration, softening or otherwise, or when this latter is more or less transparent, arborizations may appear; they are in fact, often almost naked, surviving the wreck of the disorganized tissues to which they had belonged. However red, hard, and swollen the mucous membrane may be, by disintegrating it gradually by scraping, the blood appears in minute points or dots, widening as you progress outwardly, appearing like cones with their apices pointing towards the centre of the stomach, their bases resting in the outer half of the sub-mucous tissue, where a layer of vascularity spreads over the inner surface of the muscular coat in acute hyperæmias of this organ.

It is a very great error, in a scientific point of view, whether in public or private practice, to *pick* or *select* subjects for dissection, on account of something extraordinary in the previous history or in the external post-mortem anatomy, for by so doing we keep among the exceptions, not the general rules; we study monstrosities, not the common run of cases. Few, indeed, can expect out of the irregular to establish its regular laws, as St. Hilaire has done in monstrosity itself.

As a modifier of post-mortem appearances, *treatment* is, doubtless, a very important subject of investigation; a treatment essentially wrong, aggravates, seldom creates the morbid appearances, while the proper treatment lessens their natural tendency more or less. For example, whatever good or bad effects quinine may have in yellow fever and other fevers, given in doses ranging from one grain to two drachms, it appears not to create certain morbid appearances, which some ascribe to it instead of the malady. Serosity of the brain, opacity and tenacity of the arachnoid—vascularity, thickness, infiltration, and firmness of the pia mater, acute hyperæmia of the stomach, &c., are not attributable to that

mode of treatment. The candid Eclectic will need humility and patience when he comes to compare and count organs with the Quininian, the Sanguinarian, the Inertiarian, the Hydrargian, the Non-medicationist of the *Method Expéctante*, and other exclusives. In these dissections, to which I have so often alluded, nearly *every mode of treatment is represented and reflected:* in some, *no treatment*, or one wholly palliative was adopted. When a physician, wedded to a particular school of practice, "who has made up and expressed an opinion" in regard to his late, but now defunct patient, comes to the examination and bears testimony against himself, he is doing more than any court in christendom exacts under oath. Rochefoucault says, "we need not be much concerned about such faults as we have the courage to own." A man who dissects none but those who have died under his own peculiar treatment, to say nothing of the biases of pride and theory, must of necessity take a one-sided view, calculated to foster that narrow Idealism which is, in medicine at least, a concentrated impersonation of all that is Real, since it opens the veins, blackens the body with leeches, marches into our vitals with the strongest preparations, compatible and incompatible, that chemistry can produce.

Prof. GRAVES. of Dublin, strongly insists upon the necessity of morbid anatomy to correct these narrow views of the mere symptom-hunters. "Medicine has followed medicine, each symptom has been the object of attack, until death approaches with accelerated step, and charitably closes a scene distressing to humanity and disgraceful to the cause—I was going to say—of science; but who will give so ennobling a name to this pseudo-practical knowledge—this worse than absolute ignorance. I am not combating phantoms; I do not Quixote like contend with imaginary giants; no, what I have described exists; the picture I have drawn has many an original."

THEORETICAL WORDS lead to latitudinarian and erroneous results, and should be excluded from dissections altogether.

The physical appearances alone must be given—*accurate descriptions,* as in the science of geography, the *morbid and healthy geography of organs.*

I have, in these descriptions, avoided the word *inflammation,* a word that even now is so vaguely applied, as to include the most opposite appearances in color, consistency and size. When an organ is *blanched, reddened, thickened, thinned, softened, indurated, brittle, tenacious, tumefied, ulcerated, puffy, excavated, infiltrated, perforated, enlarged, diminished or otherwise altered,* the fact is so stated, together with all its accompanying *physical characteristics.* This mode, though not very summary and compendious, is in conformity with the dictates of common sense. Let not the matters of fact be confounded with the matters of opinion.

Let us illustrate this matter:—S—— B. E——, of Massachusetts, aged 19, who died of yellow fever, August 5th, 1842, the first fatal case in the epidemic of the season, and who was dissected seventy-five minutes afterwards (by Drs. Wederstrandt, Fenner, Slade, Saunders, and myself—Dissection LXXIII), presented the following appearances of the mucous membrane of the stomach:—"One-third of the mucous membrane, and of the sub-mucous tissue next to the cardiac orifice, were of a deep claret color; when scraped, innumerable small bloody points appeared, without arborizations; the entire membrane having a natural consistence, thickness, and tenacity, peeling in strips an inch long, leaving the muscular coat natural (dull white), except a reddish spot, corresponding to a button-shaped clot of blood, as large as a dime, which formed a dense infiltration of the sub-mucous tissue, with the filaments of which it was intersected." Now, with the exception of this ecchymosed spot, and the intense coloration, all the coats were healthy, free from thickening, puffiness, softening, ulceration, induration, or other departure from the natural state. Here (omitting the button-shaped extravasation, often met with,) we have one element of inflammation. But, is *color, per se,* an indubitable proof of the presence of inflammation, in the absence

of all structural alterations whatever? One pathologist may call the above appearance inflammation of the stomach; another may deny this as positively, or doubt as to its pathological character. What must an honest dissector do in the premises? Let him describe the *physical appearances* truly, instead of deciding the pathological question, by writing down the word inflammation. Stronger cases might be multiplied, showing that slate-color and even deep black (sometimes in the form of a very fine, dust-like, powdered charcoal imbedded in the mucous tissue)—arterial, venous, claret, mahogany and other colors, exist independent of any appreciable changes of structure.

The word *congestion*, in its application to the brain, is very often misunderstood, so as to imply a physical impossibility. If the brain when the circulation is natural, be a plenum, or nearly so, as it is admitted to be, and is like water, incompressible, then general congestion, from an absolute augmentation of blood in the cranial cavity, cannot happen unless the bones be separated: the relative situation of the blood changes, not its quantity. The meningeal artery is by a blow ruptured—a broad clot extends over a considerable portion of the brain; a blood vessel spontaneously ruptures in the substance of the brain (apoplexy), forming an irregular coagulum as large as the fist; or, serosity accumulates to the extent of half a pound: but such accumulations in one part must exclude or displace just as much blood from entering the brain to other parts during life. I have seen more than a hundred instances of serosity of the brain, with vascularity of the pia mater; but if the serosity be great, usually the blood vessels are collapsed. So of that doubtful lesion called *hypertrophy of the brain:* if any real enlargement happen, it is probably at the expense of the general circulation, by excluding from the arteries and veins, great and small, an equal quantity of blood.

Many of the French pathologists have adopted a *nomenclature*, in many instances very convenient, and expressive of general conditions or states of morbid alteration; not much is gained, however, by adopting such words as *acute hyperæ-*

mia, chronic hyperæmia, as substitutes for *acute* and *chronic inflammation.* In order to avoid endless repetitions, I have been compelled to write the word *healthy or natural,* immediately after the organ mentioned, without describing the characteristics of healthy anatomy, particularly in relation to some of the less important structures, as the lymphatics, pancreas, kidneys, bladder, &c., though *in all doubtful cases the description is given.**

The average TIME required to make a dissection with care, including the time for pencil notes, and then copying, is about four hours. It is true that in the ordinary mode of proceeding, the stomach, &., may be seen in as many minutes. But it is quite a different affair, to examine, to remove, and then re-examine each organ, opening every inch of the bowels, washing, macerating, holding up in the sun every part, &c. Louis says, "practice in order to collect observations, is a *trade,* and like all other trades must be learned, and cannot be divined." A *theoretical abandon* is proper in making a dissection; after it has been faithfully recorded, let it be as completely forgotten as possible while making the next.

The laborious, and to some, repulsive character of these necessary studies, should not deter the conscientious student; for though he should not increase his gold thereby, yet he will *deserve it honestly;* the difficulties incidental to these pursuits, in thinly inhabited country situations are almost insurmountable, and therefore a resort to cities for this purpose is desirable before settling down for life. For this purpose *New Orleans* is unsurpassed by any city in the Union. Here, there is no prejudice against dissections. Her great Charity Hospital offers practical facilities on the largest scale. Every young physician in the south and west, may also furnish himself (without cost) all necessary anatomical preparations.

The DEAD-HOUSE, situated in the rear of the Charity Hos-

* If the average number of healthy organs in each case of dissection amount to twenty, then two hundred cases will amount to four thousand instances, requiring as many special descriptions, unless we adopt the word healthy or natural, in order to avoid repetitions.

pital, in a noisless and unfrequented spot, and consequently favorable for post-mortem investigations, is divided into two apartments, called the reception and the dissecting rooms. In the former the corpse is deposited on a stone floor, by two men whose business it is to coffin the dead. The bodies of males are covered with a sheet only, which is removed before the corpse is placed in the coffin; females are always furnished with garments in which they are buried. If, as rarely happens, the friends of the deceased wish to bury the body, a ticket is placed over its breast by order of the clerk of the Hospital. The dissecting room is ventilated, sky-lighted, and supplied with tables and water. How different from the agitation, noise, confusion, and hurry, incidental to post-mortem examinations in private practice! Here, the operator is not dismayed by the fear that each sound of the saw or hammer, will be echoed back in a sob or a shriek by some relative of the dead, in the adjoining room.

In the dead-house, Europe, Asia, Africa, and America are all represented. The Caucasian or European face, fair and symmetrical, is by far the most common; the Irish, German, French and English greatly predominating, the Mongolian or olive Asiatic, and the African, being most infrequent.

Here, in yellow-fever seasons, the mountaineer of Switzerland, the low-lander of Holland, the Swede from the icy circle, the Mexican from the tropics, the New Englander from his blue hills, and the country Creole from his black swamps, the virgin just arrived at womanhood, and the matron who has not yet passed the meridian of life, lie, side by side, with the saddest features, as if reproaching us for not saving them from an untimely grave. In this contemplation of the dead body upon a large scale, where many, the young, the robust—victims of a single night—lie crowded together, one naturally is reminded of what Moliére makes Beraldo, in the *Maladie Imaginaire*, say: "I do not know a more pleasant piece of mummery, or any thing more ridiculous than for one man to undertake to cure another."

The dead-house, it must be confessed, produces a little skep-

ticism, but it is a wholesome skepticism when making an exploration into the realms of death; even systematic anatomy will abate something of its pretensions on the score of oracularity. The observer finds *irregularities* of structure accumulating on his hands, with surprise, unless he belong to that class, that nothing medical can surprise. One of the greatest anatomists denies that the testicle is ever missing or single, yet I have met with such a case; also a man with organs of generation unmarked with any sign of puberty, being in the infant state of development; a woman with one kidney; in another it was wrong side up; the stomach adherent to the uterus, and irregularities too numerous to mention. One irregularity, referable to morbid anatomy, I will here mention at the risk of being suspected of leaning towards the marvellous. Depending on memory alone (not having leisure at this moment to make an exact estimate), I suppose that about ten per centum of those dying of fevers in this city, have from one to four complete *intus-susceptions* in the small intestines, sometimes six inches in extent, at least such has been one of the results of my observations.

I append the following analysis of the *color of the liver* in yellow-fever, not that it is equal to many other appearances of this and other organs, in pathological importance, but, because it happens to be the most convenient. For though I am collecting facts on fevers and bowel-complaints, and have copied many into the anatomical portion, I have not analysed them with precision. However, I am sure there is no material error in this enumeration. The terms and comparisons used are more or less varied in the original.

Yellow, as orange, lemon, straw, brass, gingerbread, cork,	54
Yellow and milky,	3
Nutmeg and straw-yellow,	4
Brown and yellow,	2
Brown and yellow, with lines or streaks,	2
Yellow, milky, and mahogany, with lines,	1
Yellow and healthy, mixed,	1

Bronze and reddish,	4
Pale brown and mahogany,	9
Purplish and brown,	1
Mahogany and white,	3
Chocolate,	4
Flaxseed,	5
Dark,	1
Reddish, brown (nearly healthy),	1
Black and brown,	2
Dark, mustard,	1
Black and purple,	1
Greenish and chocolate,	1
Dark and greenish (stratified),	2
Lead-color,	1
Purple and white,	1
Accidental omissions (in making notes),	4
Healthy or natural (that is, brown, with slight reddish tint externally, and a yellowish tint internally),	6
Total examinations (yellow fever),	114*

The liver presents many other points for analysis, as to size, cohesion, membranes, anæmia, hyperæmia, &c.; also, oyster-like degenerations of the gall-bladder, effusions of albumen into that cavity, and other important alterations.

* These researches, so far as mere *color* of the liver is concerned, agree in many instances, with those of Louis on the yellow fever of Gibraltar, in 1828; but more generally they are very dissimilar, especially upon the brain, hæmorhages, &c., a fact admitting of satisfactory explanation, without calling in question the accuracy of the commission (of which Louis was one), sent by the French Government to Gibraltar, in 1828, for the purpose of investigating this malady. Their post-mortem examinations were, I believe, nearly all made in the winter, when the epidemic had declined, or nearly so. Except in a single case, they did not, personally, observe the ante-mortem or previous history, and, among their 23 or 24 cases they mention a number as not being yellow fever, as the 13th, 15th, 18th and 24th, and, perhaps, some others. (I quote from memory.) Besides, the yellow fever of Gibraltar and that of New Orleans may differ from each other.

I have not, in this paper, even glanced at the morbid appearances of the FLUIDS. The stupendous conclusions at which certain pathologists seem to have suddenly arrived, appear defective in one essential matter, *evidence, facts.* Even oxygenation, carbonization, de-fibrination, super-fibrination, &c., are better known than appreciated in morbid anatomy. But the new *chemical metaphysics* by which the "alkaloids of opium," "quinine," &c., become chemically combined or converted, or transformed into brain and nervous matter, and then cure chemically by diminishing oxygen, &c., are quite too transcendental for a poor dissector, though well enough adapted to flourish in the realms of German idealism, where the genuine *Monades* are said to exist, out of which it is gravely declared a god will some day be created, if one do not exist already.

With the words, black blood! carbonized blood! putrescent blood! still ringing in our ears, we begin to hear of blood too rich, too fibrinous, over charged with oxygen—(the sensible appearances lean a little towards the latter)—but the easy mode of setting aside the utility of dissections, by referring diseases to the nervous system unaccompanied with any alterations of structure, is an explanation requiring explanation: and so of the fluids. I would like to see the humoralist that can distinguish, by sensible appearances, the blood of a yellow-fever patient from that of the most healthy man; yet they are not always alike.

January, 1843.

Bibliographical Notices.

ART. II.—*A Therapeutical arrangement of the Materia Medica; or the Materia Medica arranged upon Physiological Principles, and in the order of the general practical value which remedial agents hold under their several denominations, and in conformity with the Physiological doctrines set forth in the Medical and Physiological Commentaries.* By MARTYN PAINE, M. D., A. M., author of the Commentaries, and of the Letters on the *Cholera Asphyxia* of New York, and Professor of the Institutes of Medicine and Materia Medica in the University of New York. New York: J. &. H. G. Langley, 57 Chatham Street, 1842, p. 271 duodecimo.

This little volume presents as fair a claim to the motto, "*multum in parvo*," as any production of the American press, or indeed of any press, that has fallen under our notice. And it contains, for its size, not only a *large amount* of matter, but matter of a practical and valuable character. Were we inclined to appear, on the occasion, either classical or poetical, or both at once, we might correctly enough apply to it the distich of the great and accomplished Mantuan, in his poem on bees;

> "In tenui labor; at tenuis non gloria, si quem
> Numina læva sinunt auditque vocatus Apollo."

The title-page itself of the work so far discloses its character and design, that our readers need but little more for the attainment of a competent knowledge of them. From that page they will at once perceive, that Professor Paine is a thorough-bred and uncompromising vitalist. Hence they cannot

fail also to learn from it that he considers the science of medicine as consisting in a true and complete exposition of the laws of living organized matter; and the practice of medicine in a correct application of those laws to the treatment of diseases—the means of treating them being derived from Materia Medica. And they will further be made sensible, that, as a writer and teacher, he denies the existence of any identity, connexion, or even close analogy between the philosophy of living and the philosophy of dead matter. In more express and definite terms, they will thus learn, that he regards physiology, in its principles and laws and their mode of action, as essentially different from those of either chemistry or the science of mechanics; and as being an exposition of functions exclusively *vital.*

Still however, though so much, respecting the character and design of the volume may be ascertained from the title-page, we think it best to *lay* before our readers a brief extract from its preface, in more definite explanation of them.

"These purposes" (those of the work we are considering) are mainly:

"1. To arrange the *Materia Medica* upon intelligible, physiological, and therapeutical principles.

"2. To indicate the relative therapeutic value of the various articles, under their different denominations, by arranging them in the order of their value.

"3. To give to the student a comprehensive and ready view of the merits of the various articles composing the *Materia Medica*, and of their relations to each other *physiologically.*

"4. To supply a convenient means of graduating the doses of medicine."

From that portion of the work which is headed "General principles," we shall also make a brief extract, our object in doing which will presently appear.

"1. All remedies operate upon the same principle as *morbific agents*, and all become morbific when injudiciously applied. Applied to healthy systems, they alter the vital properties and actions so as to constitute disease. * * * "Medi-

cines" says Linnæus, "differ from poisons, not in their nature, but in their doses." And so Pliny; "*ubi virus, ibi virtus.*"

"3. All curative agents operate upon the *morbid properties*, either directly or indirectly through sympathy, and produce their salutary results, by so altering the morbid properties, as to enable them to take on their natural tendency to a state of health."

These three last quoted paragraphs show our author to be a liberal, bold, and independent thinker; and we fully concur with him in the sentiments they express. *Medicine* and *poison* are but different names for the same article, according to the quantities and modes *in* which, and the circumstances *under* which it is administered. And all remedies which actually change disease are necessarily *alteratives*, from the nature of the case, and the meaning of the term.

As relates however to the third paragraph, our coincidence in opinion with the Professor is not quite so entire. At least we do not like the expression "operate on properties" whether they are morbid or healthy; because we think it calculated to make an erroneous impression. Agents do not act immediately on "properties," which have no existence apart from the substances to which they belong. They are but the attributes, signs, or shadows of such substances. To operate on *them* therefore is tantamount to operating on a non-entity. The operation is *on* the substance and the change produced is *in* the substance; and the properties of course experience also a corresponding change; because as is the substance, so necessarily are they. This is true of all properties, whether the substances they belong to be living matter or dead matter.

In illustration and proof of this, let us consider for a moment the properties of elasticity and weight. We cannot operate *immediately* on them. To change them, we must change the substances to which they belong. The production of an alteration in properties then is of necessity an indirect process. The reason is plain. It must reach them through the substances to which they appertain.

We should not have noticed this error in *mere words*, had

they been the words of an ordinary writer; or had they been employed but once even by Professor Paine. In either case we might have regarded them as slips of the pen, and allowed them to pass without animadversion. But the Professor is able in intellect, and distinguished and influential as a writer and teacher, and has repeatedly used them in the course of his work. His errors therefore, whether in words or thoughts, are of bad example, and dangerous, because they lead weaker minds astray. Hence their rectification is necessary and important.

Professor Paine arranges the articles of Materia Medica under twelve heads, which he denominates and classes in the following order, and under the names attached to them.

"1. Antiphlogistics. 2. Permanent Tonics. 3. Diffusible Stimulants. 4. Cerebro-Spinants, or Nervous Agents. 5. Astringents. 6. Uterine Agents. 7. Urinary Agents. 8. Anthelmintics. 9. Errhines. 10. Chemical Agents. 11. Diet and Regimen, in a general sense."

This arrangement (and we presume not to say that it can well be improved) does not amount to a complete execution of our author's plan, already communicated in his own words. It does not we mean, in every particular, strictly conform to physiological requirement. This is the case with the class of

"Tonics," that term not being properly applicable to *living* matter in any condition it can be made to assume, but to dead matter in a state of *tension.* This may be illustrated by the condition of well prepared bows, and by that of drums, harps, violins, and other instruments of music. These several instruments must be in a "tonic," that is a *tense* condition, when well fitted for the purposes for which they are designed—the first to lanch the arrow, and the others to send forth well-conditioned musical sounds. As regards the condition of the bow and bow-string, the cords of the harp and violin, and the head of the well-braced drum, nothing at all analogous to it is produced by the action of "Tonics" on any portion of the human body. In the condition of a healthy

and vigorous muscle, nerve or gland, there is no more of *tone* or *tension*, in the true sense of the terms, than there is in the condition of a deranged nerve or muscle. The word *tone* belongs to *mechanical*, not to *vital* philosophy. Still, however, provided we divest it entirely of its literal, mechanical, and coarse meaning, and so interpret it as to signify soundness and excellency of condition, it *may*, without communicating such mechanical views as are highly injurious, be applied to vital matter. And we confess our inability to substitute for it a better term.

We fully however concur with our author, that what are called "*tonic*" remedies are greatly overrated, as relates to their usefulness. In many cases, especially of chronic diseases, they *may*, and we doubt not *do*, *as alteratives*, prove serviceable. But, from the injudicious manner, in which they are exhibited, we have long been convinced that, in convalescence from *acute* disease, they do an immensity of mischief. Indeed, in such cases, provided the complaint be sufficiently deracinated, by antecedent means, they are wholly unnecessary; and usually injurious. When, by a judicious treatment, an acute disease is brought down to the proper point, *nature*, by her recuperative energies, most safely and effectually completes the cure. The best tonic under those circumstances is a well directed regimen and form of diet. Every thing beyond that embarrasses nature, and impedes her in her efforts to remove the complaint. Nor is this view of the matter at all inconsistent with the fact, that tonics are efficaciously employed in the treatment of intermitting and remitting fever. That, even in those complaints however, tonics, unskilfully administered, are productive of much mischief, is a circumstance familiar to every experienced practitioner of medicine.

To the class-term "Astringents" similar remarks are correctly applicable. It is not, in its import, strictly physiological. True; the articles thus denominated produce an astrictive effect on the lips, tongue, and fauces of those who swallow them. But there the astriction stops. Though the func-

tions of the system may be affected by the article, the affection is alterative, not astrictive.

To the class-term "Anthelmintics" also exception may be taken on the same ground. It bears no direct relation to physiology—certainly none to the physiology of man, whatever may be its relation to that of other animals. It signifies articles *deletereous to worms*, and nothing more. Of the effect of those articles on the human system it is in no way expressive.

Let it be distinctly understood however, that these animadversions on some of his terms are not to be construed into a sentiment of disapproval toward Professor Paine, as a writer. Far from it. We do not remember any terms more suitable that might be offered as substitutes for those to which we have excepted. The defect in the class-names arises much more from the intractable nature of the case than from any fault in our author. The result is therefore matter of *regret*, because it *cannot* be amended, rather than of *blame*, because it *is not*.

With the Professor, in his views respecting "Cold" we cannot concur. He arranges and treats the article as a *direct sedative*. We, on the contrary, regard it as a *direct stimulant* and an *indirect* sedative. To the *nerves* it is not only a direct, but also a very *powerful* stimulant. It may be made to produce keen and intensely painful sensations—a result which cannot possibly be the product of a sedative.

Nor is cold a stimulant to the nervous tissue alone. It also acts most powerfully as such on the vascular system. When carried to a sufficient extent, it not only burns, but actually *blisters*. A piece of frozen quicksilver received into the hand burns and blisters like red-hot iron—an effect totally foreign from the influence of a sedative.

Frozen quicksilver and red-hot iron however, although they produce the same effect on the hand, do so in modes the very reverse of each other. The iron burns and blisters by pouring caloric superabundantly *into* the hand; the quicksilver by drawing caloric superabundantly *out of it*. In doing this it

brings the caloric, in a large amount, to a *focal point*, in consequence of which it acts like the solar rays, brought to a point, by a powerful burning lens.

Such are our views respecting the mode of operatiou of frozen quicksilver. And whether they are right or wrong, the fact they relate to is certain. The quicksilver which is intensely cold, excites a blister. But this it could not do, were it not a stimulant.

Cold is an antiphlogistic remedy, because it is an *evacuant.* And, so far as they are evacuants, all medicinal substances are antiphlogistics—as necessarily and essentially so, as blood-letting itself—though not in an equal degree.

Blood-letting alone excepted, all evacuations from the body are the offspring of secretion. Except the fæcal discharge, evacuation is but the discharge of secreted matter.

If this be true (as it unquestionably is) secretion is nature's chief mode of removing inflammatory affections. Thus the secretion and evacuation of bile cure hepatitis. The secretion and discharge of mucus aid in the removal of the several kinds of thoracic and pulmonary inflammation. A superabundant secretion and evacuation of saliva take down inflammation of the salivary glands. A copious secretion and discharge of urine aid in the cure of nephritis. The secretion and evacuation of pus contribute to the cure of the inflammation and congestion attendant on abscesses. And the secretion and discharge of perspirable matter aid in the removal of every affection to which man is subject. To the cure of all *febrile* affections they are indispensable.

From these considerations we have long been of opinion that there is just ground for the formation of an *order* at least, if not a *class* of remedies, under the denomination of SECRETORIES. And it would be an extensive and important one. For we venture to say that every remedy, which contributes to the cure of a general disease, does so, to no small extent, by throwing into natural and healthy action some of

the secreting organs of the body. Hence arises what is denominated, by most of the ancient medical writers, and by not a few of the modern ones, the *critical discharge.* And though the regular occurrence of such discharge is even tauntingly discredited, by many physicians of the present day, it is notwithstanding true. The evacuation comes most frequently from the liver and alimentary canal, the mucous lining of the trachea and lungs, the kidneys, or the *skin.* But no matter whence it comes. Its existence is certain. And when of a local character, as it often is, it proceeds from the organ, or its neighborhood, where the deepest congestion exists; and it relieves or removes that congestion.

The critical discharge is the product of nature; not of medicine. Nor does the good it effects arise from, or depend on, either its quantity, its kind, or its quality—nor from all these attributes united. It is to be regarded but as indicative of good, as evidence we mean that the course of action in the system of the sick is changed. And that change of direction is from *centripetal* to *centrifugal*—a change which is always salutary and of good promise. In febrile complaints the course of action is from without to within; and usually secretion of every description is restricted. And when the action changes its direction, from within to without, the secreting organs are thrown into operation again; and the result of that change is the restoration of health. But we can pursue this desultory notice no farther. In a few general and brief remarks, therefore, we shall bring it to a close.

The volume we have been considering, though small, exhibits notwithstanding a large amount of acquired knowledge, and no small degree of strong, independent, and well matured thought. Its arrangement, and the peculiar tenor of its doctrines and directions, are entitled to our entire and decided approval. We regard it, however, as little else than a syllabus or text-book for Professor Paine's course of lectures on Materia Medica. And, as such, we deem it peculiarly valuable to the pupils to whom those lectures are de-

livered. To them, during their pupilage, it will prove a highly convenient and useful companion in the Professor's class-room, as well as in their own studies, and even when subsequently engaged in professional practice, a ready and abundant remembrancer of what they have already learned. Nor, limited as the work *is* on every topic, will even those, who have not attended the lectures of its author, fail to derive from a careful perusal of it many important and some new philosophical views of Materia Medica. In these respects, therefore, the volume is cordially recommended to public attention.

C. C.

ART. III.—*The Diseases of Females: including those of Pregnancy and Childbed.*—By FLEETWOOD CHURCHILL, M. D., author of the "Theory and Practice of Midwifery;" Licentate of the King and Queen's College of Physicians in Ireland, &c. &c. Second American edition. *With notes*, by ROBERT M. HUSTON, M. D., Professor of Materia Medica and General Therapeutics, &c. &c. 1 vol., 8vo., pp. 575. Philadelphia, Lea & Blanchard, 1843.

The two parts of which this volume is composed were originally published separately, that "On the Diseases of Females" first, followed after an interval by the "Diseases incident to Pregnancy and Childbed." They are very properly combined in the present edition, and constitute by far the most complete and systematic work on the subject that we know. Both are compilations for the most part, and do not claim to be any thing more. The author has intended to make the work acceptable both to the junior and senior student; to this end, to use his own language, "it has been arranged, in the present volume, that the *text* shall contain an ample outline of the history, pathology, symptoms and treatment of the diseases, without any detail of controversies or conflicting opinions, which are given in full in the *notes* appended to each page; so that the junior student, by confining his attention to the text, may acquire

elementary information, which may be subsequently extended by consulting the notes and references."

The notes of the American editor are not very numerous, but pertinent, and we would add *judicious*, if we had not such a horror of the word. C.

ART. IV.—*A System of Anatomy for the use of Students of Medicine.* By CASPAR WISTAR, M. D., late Professor of Anatomy in the University of Pennsylvania. *With notes and additions.* By WILLIAM E. HORNER, M. D., Professor of Anatomy in the University of Pennsylvania. Eighth edition. *Entirely remodelled, and Illustrated by more than two hundred engravings.* By J. PANCOAST, M. D., Professor of General, Descriptive and Surgical Anatomy in Jefferson Medical College, etc. 2 vols., 8vo., pp. 538, 622. Philadelphia: Thomas, Cowperthwait & Co.; 1842.

Dr. Wistar's Anatomy has always been a favorite with students, and has accordingly passed through numerous editions. Indeed it has been *worked over* so often, that we can scarcely recognize it as the book with which we began our professional studies; even at that time it had been more or less changed by editors.

Professor Pancoast has retained the matter introduced by the former editor, Professor Horner, to which he has added a large amount of new matter, compiled from various sources, chiefly in relation to general and microscopic anatomy, the latter of which has been for some time and is now attracting so much attention. The work is fully brought up to the existing state of the science. It is embellished by the introduction of colored copperplates, eight in number, from Bell, and upwards of two hundred wood-cuts, selected from various authors. The latter are executed in superior style, as are all other portions of the work. In truth, of the many reprints that have come under our notice, this is by far the most beautiful in appearance. It cannot fail we should think to be received with equal favor as the former editions. C.

Selections from American and Foreign Journals.

On a Variety of False Aneurism. By Robert Liston, F. R. S. Read to the Royal Medical Chirurgical Society, March, 1842.—Mr. Liston having stated, in his introductory observations, that he has met with a remarkable instance of disease, and that much benefit is likely to result from the detail of unsuccessful cases, narrates the case, first published in The Lancet, of which the following is a summary:

"A boy, nine years of age, about two months back, after an attack of cough and fever, became the subject of a swelling below the right ear, which was fomented and poulticed. The tumour slowly increased, but a few days before his admission into the hospital it began to progress rapidly. By projecting into the fauces it impeded respiration and deglutition, and it pointed near to the posterior border of the sterno-mastoid muscle. An obscure fluctuation was perceived by the touch, and some degree of pulsation in the course of the carotid artery."

Let the unprejudiced reader review this evidence, and state the nature of the case from the symptoms. Would he believe it to be one of aneurism? We ought not to credit that he did, were he to answer in the affirmative. Does he recollect the rarity of aneurism in a child? Did he ever hear of carotid aneurism in a child? Does it accord with the history of aneurism, that aneurism should appear and become developed, almost to bursting in two months? It is not usual to find the artery, in a case of true aneurism, passing over the superficial aspect of the tumour. The reverse of that is always the fact. Moreover, is it likely that an aneurism of the common carotid would acuminate behind the posterior border of the sterno-mastoid muscle? Every well educated surgeon must reply in the negative.

Mr. Liston regarded this tumour as an abscess, and intro-

duced into it a bistoury, when out spurted a jet of arterial blood. The opening was secured, and on the following day the carotid artery was tied. In other words that treatment was adopted which would have been followed had the true natures of the tumour been detected at first. On the thirteenth day after the operation, secondary hæmorrhage from the seat of the ligature ensued. This was repeated on the fifteenth and sixteenth, and on the latter day the boy died. This treatment was accordant with sound practical surgery; and, now, what was the result of the post-mortem examination? A verification of the diagnosis of Mr. Liston. There was no disease or dilatation of the arteries, but on the posterior aspect of the common carotid, just at its bifurcation, a circular aperture was found, communicating with a cyst of condensed cellular tissue, lined by a pyogenic membrane, identical with the ordinary structure of the cyst of an abscess. The coats of the artery were seen to terminate abruptly at the edge of the opening, and there was no coagulum in the sac. This certainly was not a case of ordinary aneurism, but an instance of a rare surgical affection, an abscess communicating by ulceration with an artery, and thus giving rise to a "variety of false aneurism." The abscess had formed behind the artery, raising the latter from its bed, and separating its connections, so as to deprive it of its share of nutrient vessels. In this state of the vessel ulceration was a natural consequence; an aperture was formed, and the cyst of the abscess, previously small, became rapidly distended. We do not dwell on any question relative to the non-appearance of pus, either in the jet or after death. Who could distinguish pus, probably a small quantity, in a jet of arterial blood, or in arterial blood occupying a cyst of large size?

Having carried the matter to this point of the inquiry, we express here our opinion that Mr. Liston has conferred a benefit on medical science by recording the history of this variety. The paper is accompanied by eight cases which Mr. Liston considers to be of an analogous kind, and as proving the liability of the human system to such occurrences, and awakening attention to this additional means of forming a perfect diagnosis under similar circumstances, leading to the most judicious mode of treatment.

The first of the cases appended occurred to Dr. Craigie. It consisted in an extensive abscess of the tonsil, running down the sheath of the carotid vessels, and communicating with the common carotid, close to its bifurcation.

In the third case the femoral artery was opened, by slough-

ing, into a deep-seated abscess. The fourth case fell under the observation of Sir Astley Cooper.

In the fifth case, recorded by Mr. Syme, the affected artery was the popliteal. In the sixth, Mr. Gulliver's case, the carotid opened into a pharyngeal abscess. In the seventh, Mr. Fergusson's, the lingual artery communicated with an abscess in the neck; and in the eighth the opening existed in the arch of the aorta. The latter case is narrated by Breschet, and evinces much judgment and philosophy in its details.

"'It seems to prove,' says the writer, 'that medical science is thickly studded with difficulties, both as relates to diagnosis and treatment. It is to be remarked that sanguineous tumours, communicating, by a very small opening, with the interior of an artery, evince no pulsations in the early periods of the disease, when placed deeply among the tissues; and that, even in the latter stages, the movement is less a pulsation than a vibration, or trembling. This fact is deserving of attention, inasmuch as it may be the means of enabling surgeons to judge, *a priori*, whether the disease is a sanguineous tumour, produced by the dilatation of an artery, or by the *erosion* of a part of the parietes of the arterial canal.' "—*Lond. Lancet.*

A Submarine Thermometer.—This is a French invention of the celebrated Mons. Clement, which has been tried lately in England in presence of the Lords of the Admiralty, on board the Lightning (steam vessel) Lieutenant Commander G. Snell. In relation to this new invention, we find the following in a late London paper.

It appears from the thermometrical observations of many scientific navigators, that in seas of unfathomable depth the water is not so cold as over the banks, and that over banks near the shore it is less cold than over those at a greater distance, but colder than in the sea. In experiments which have been made on the coast of France with this submarine thermometer results have been obtained which fully establish the great service which this instrument may render to navigation, by furnishing a sure and constant indication of all sudden changes from deep to shallow water. It is evident also that it will serve to point out the proximity of vessels to icebergs which at certain seasons of the year render the navigation of the Atlantic attended with danger. This test could not, of course, be made in the experiments with the Lightning, but the other important qualities are correctly ascertained. Clem-

ent's thermometer is kept constantly under water at the same depth, and indicates the different temperatures of the water by means of a dial placed on the deck of the vessel, and always open to examination. The immediate action is communicated by wheels, the working of which turns two hands upon the dial, the one marking the single degrees, and the other the tens. The whole is enclosed in a tube, and attached to the side of the vessel.

The same gentlema, Clement, is also the inventor of two instruments that have been well tested in France and England, to ascertain the speed of steam vessels, and to determine the heat of water in their boilers. The first is named a *Sillometer*, a title given to a substitute for the common log; and the second is termed the *Steam Engine Indicator*. The three instruments are described as being inventions of great practical value.

The Salts of Quinia.—Prince Lucien Bonaparte has been making further researches on these medicinal agents. We have already once alluded to his experiments. He now recommends the employment in practice of both lactate and valerianate of quinia in preference to the sulphate, the latter not producing those functional derangements in the nervous system which the sulphate sometimes causes; and the former on account both of its greater solubility and more energetic action. The fact, established by various physicians in the Roman Maremme, that quinia alone, or its hydrate, is more efficacious as a remedy for intermittents than the sulphate, the prince considers due to its being converted into a lactate by the lactic acid of the gastric juice. This opportunity may be taken to mention (see Gaz. des Hopitaux) that attempts have been made to combine quinia with ferrocyanic acid, and a substance entitled *hydro-ferrocyanate of quinine* has crept into pretty extensive use among French practitioners. But Pelouze has ascertained that this substance is in reality nothing more than quinine mechanically mixed with a little Prussian blue, the consequence of spontaneous decomposition of the acid.—*London Lancet*, Jan. 28, 1843.

Consequences of the Accidental Introduction of pieces of Glass into the Body.—Eck, of Berlin, reports in the "Medic. Zeitung," 1842, No. 32, that a Prussian subaltern officer was

affected with a partial paralysis of the right arm, which had resisted all the general and local means of treatment employed for its removal. This paralysis, which chifly exhibited itself in the flexor muscles, had been preceded in its commencement by sharp pains, extending from the palmar surface of the thumb along the forearm and humerus. Eck examined the thumb on its palmar side, and on observing several old cicatrices there, he elicited from the patient that a few years previously he had fallen down with a bottle in his hand, several fragments of which had penetrated his thumb; but, as he had been assured, every one of these was afterwards extracted. Eck, however, rationally conceiving that some fragment might still remain to keep up the present symptoms, pressed each of the cicatrices with some force, which operation in one place caused acute pain. He accordingly made a deep incision in that place, and on probing it with the end of a bistoury he found his instrument distinctly to strike against a hard and gritty substance. After the hæmorrhage had been in some degree assuaged, Eck, who now made out clearly that this substance was a piece of glass, extracted it by the help of a pair of forceps, dressed with charpie; but with considerable difficulty, so deeply was it imbedded, and closely enveloped with the surrounding structures. It proved to be about half an inch in length, and of a curvilinear shape, its larger extremity having been the more deeply seated. On its removal the patient soon recovered the complete use of his arm.

In the "Gazette des Hôpitaux" for the 22d Dec. ult., is detailed the case of a man who having severely cut himself by treading on some broken glass in his bedroom, entered the Hotel Dieu, Paris, where his wound was healed, the continuance of a piece of glass, deeply seated within it, not being recognised; but about five months afterwards he was unable from pain to put his foot to the ground, and he re-entered the hospital. Breschet, after ascertaining the fact that a foreign body still remained within the foot, made a crucial incision in the sole, and extracted a piece of glass, nearly an inch in length by half an inch in breadth, from the space between the first and second metatarsal bones. A severe attack of phlebitis supervened after the operation, as far upwards as the groin, and which was not overcome without much care, nor until the lapse of nearly a month, the patient being of a lymphatico-nervous temperament.—*Ibid*, Jan. 21, 1843.

Report of a case of Diseased Ear, which produced death, in a child of four years of age.—By THOMAS CARROLL, M. D., of Cincinnati.—M. W., a female child, was admitted into the Orphan Asylum, at the age of two years, and at the time of admission was laboring under chronic diarrhœa, which had worn it down to the last degree that life could endure; and at the same time it had suppuration of the right ear. After being in the Asylum some months, its health became better; but the ear continued to run, and the abdomen enlarged to unusual size. Notwithstanding the improvement of the general health, the diarrhœa continued, and the ear gave no evidence that suppuration would cease, though the diarrhœa at times seemed to promise a total cessation, yet it returned and became more severe at short intervals, until death. The strength did not improve as was expected, at least as far as regarded the inferior extremities, which latter circumstance was probably owing to the want of care, in not making her use them in endeavoring to stand. The want of proper exercise of the lower extremities caused a great disproportion in size between them and the rest of the body.

When I first enquired into the situation of this patient, which was in March, 1842, I found that she was fretful, and seemed to suffer pain, as she spent large portions of her nights in sitting up in her cradle and rocking herself constantly for hours; and afterwards would sleep much through the day.

As the ear ran very much, I directed a solution of the nitrate of silver to be injected into it several times a day, which was sometimes to be intermitted, and suds or warm water to be used in its place. Blisters were applied behind the ears, and her diet was rigidly regulated. For the derangement of the bowels one grain of Dover's powder, one of rhubarb, and half a grain of calomel, were combined and occasionally given. About a month before her death, a phlegmonous tumor appeared on the right hip, and suppurated, and discharged considerable matter. No sooner did this abscess heal, than the ear seemed more aggravated; the diarrhœa increased, and the whole side of the head became very much swollen; and the motory nerves on the side of the face lost their influence, showing that the portio dura of that side had become diseased. But, if motion, which had been given by this nerve, was lost; sensation, that in this part is derived from the fifth pair, was most acute. We are told by Sir C. Bell, that when a diseased condition, or rather de-

struction, of the expansion of the seventh pair of nerves on the face takes place, that the eye-lids of the affected side cannot be closed, as the orbicularis palpebrarum has its motory influence from that source. Aside from this, the present case is a beautiful illustration of the principles of Bell, for the child had the power of shutting the eye on the affected side.

The matter discharged from the ear had long been offensive, and it was evident that caries of the petrous portion of the temporal bone had existed to some extent for many months, but now the evidences were more decided, as the cavity of the ear received a larger amount of fluid than usual; and from examination the tympanum appeared to be gone. Large amounts of pus of an ill-conditioned kind was constantly discharged. The inflammation became intense over the mastoid process, and anterior of the ear; and forty-eight hours before death mortification of the integuments over the mastoid process took place; a few hours after a similar condition resulted anterior to the ear; and at death the ear was nearly ready to drop off. Poultices alone seemed to give any relief.

During the last few days the patient showed evident symptoms of great pain in the head; but at no time was there the least evidence of delirium, though much irritability of temper was evinced to the last moments of life.

After death I examined the morbid appearances of the head, aided by Drs. Woodward, Warder and Young. In exposing the cranium in the usual way, the cavity around the ear was laid open, and was found to contain considerable pus. The cavity extended over most of the squamous and petrous portions of the temporal bone, followed the zygomatic process nearly to the malar bone, and extended down the condyloid process of the maxillary bone to its connection with the angle of the jaw. The bones had lost their proper covering every where connected with the abscess; even the internal ear had not a vestage of any tissue covering the bone; and its inferior wall was perforated by caries about the eighth of an inch from the outer margin, which had been itself in a carious state for a considerable time. The foramen for the entrance of the internal carotid artery had thrown off its proper investment, and the artery meandered naked through it. The portio dura was either totally or nearly destroyed at its exit.

On the inner side of the temporal bone, and immediately at the entrance of the internal carotid, the dura mater was

found inflamed, and separated from the bone. At the base of the cerebellum the arachnoid membrane was opaque, and the surface of the brain abnormally vascular. About two ounces of fluid escaped from the surface and ventricles when the brain was exposed.

The pupils of the eye in this patient never dilated, and the eyes continued clear all the time—an instructive lesson with regard to the symptoms indicating effusion within the cranium.

This patient died at the age of four years, and had been under my care from the middle of February, 1842, until August of the same year. I do not know that any treatment could have been instituted, at any time, that would have proved efficacious in the management of the case; it is most probable that nothing could have been done, unless at a very early period. I have no knowledge of the circumstance that led to the suppuration of the ear, nor do I know at what time of life it took place.—*Western Lancet.*

Encephalo-Spinal Meningitis.—Dr. Bell, editor of the *Bulletin of Medical Science*, designates by this term, the disease described by Dr. Richardson, of Tenn., in the last vol. of this Journal (p. 430, Dec. 1842); and, after quoting Dr. R's account, gives the following notice of a discussion in the French Royal Academy of Medicine (sitting of the 6th September last) on a similar disease that prevailed in different parts of France.

"The subject of the disease described by Dr. Richardson, was brought up in a meeting of the French Royal Academy of Medicine by a Report from M. Ferrus, on a memoir sent by M. Rollet, chief physician to the military hospital at Nancy. It is well known that the epidemic meningitis prevailed in different parts of France, viz: at Versailles, Bordeaux, Avignon, Strasburg, &c. Interesting accounts of the disease have already appeared, by Faure, Villars, Chauffard, Forget, &c. It showed itself in Nancy with most severity among the military. Rollet regards it under two aspects, and as constituting two varieties: *cerebro-spinal meningitis* and *encephalo-meningitis*, according as the envelopes alone of the nervous centres, or the cerebral substance itself participate in the inflammation. At Nancy, as elsewhere, the disease

manifested itself by symptoms of great violence; there having been present the same disorder, in the meninges, active congestion, suppuration, and even softening of the brain and spinal marrow, according to the degree and intensity of the disease, as exhibited in *post-mortem* examinations of those who sank under it. The symptoms were, also, very much alike in different places in which the epidemic made its attacks, modified, however, by the seat of the inflammation;—a point on which Rollet lays considerable stress.

The subject of treatment is of course important, and it has been carried out according to the view of the pathology of the disease entertained by different practitioners. At Bordeaux, the disease having manifested some symptoms of periodicity, sulphate of quinine combined with opium was much thought of. At Avignon, Chauffard derived from opium, results described as truly miraculous. After some tentative practice, Rollet hit upon a plan which was successful, in his hands, but which he had recourse to only in cases of encephalo-meningitis. It is cauterization of the spine with red-hot iron. He used the cautery in such a manner as to give rise to a burn of the second degree, along the depression on each side of spinous process; repeating several times this energetic practice. In most cases the sensibility which had been deadened was soon revived; the pulse recovered its force and fullness, and, in fine, reaction followed sufficient to allow of bleeding the patient,—with a frequency adapted to the indications of the case. In two patients, symptoms of intermission having appeared, sulphate of quinine was employed. One of these persons died; the other recovered.

The following is a summary of the therapeutical course pursued by Rollet:—Fourteen cases of simple cerebro-spinal meningitis were treated with antiphlogistics alone; and of these all recovered. Of the same number of persons (14) attacked with encephalo-meningitis, four were subjected to the ordinary treatment, all of whom perished. The other ten were treated by cauterisation, with a result of six cures and four deaths.

The reporter to the Academy, Ferrus, eulogised the manner in which the subject had been treated by Rollet, and proposed in consequence a letter of thanks, the remission of his memoir to the committee of publication, and the inscription of his name on the list of candidates for corresponding membership.

An animated discussion in the Academy followed the report, in which Rochoux, Castel, Honoré, &c., took a part.

These gentlemen thought that Rollet had committed an error in diagnosis. The extreme gravity and indeed almost constant mortality from meningitis were well known; and how then explain this with the success in treatment as related? Probably, continue the objectors, the disease was a pernicious (congestive) fever, the paroxysms of which run into each other so as to simulate a continued fever. Some cases of rheumatism were also confounded with the reigning malady. Bousquet, in proof of the epidemic not being an open, ordinary phlegmasia, referred to the success which Chauffard had with the employment of opium. In fact, this physician, alarmed at the results of a simple antiphlogistic treatment, went over, once more, a study of all the phenomena of the disease, and detected a predominance of disorder of the nervous system which called for the use of narcotics.

To all these critiques Ferrus replies, by asserting that there was no mistake in the diagnosis. Rollet, as well as Forget, and a number of other distinguished observers in the departments, did indeed at first suppose the existence of a pernicious fever; but all of them, after an attentive and conscientious investigation, were led to form an opposite opinion. Now, when a number of enlightened men agree, without prior concert, in the same opinion, there are strong grounds for our admitting that their view is the true one. The number of cures is objected to in connexion with the nature of the disease described; but the numbers furnished by Rollet are well authenticated, and are proved by proper documents duly detailed. But, besides,—ought we to compare that which passes in one locality, or during an epidemic, with that which transpires in another locality, and when the disease is sporadic? And, again, Baudelocque remarked, that what was said of the almost uniform mortality of meningitis, applies to the granular kind in children and not to the simple meningitis of adults. The conclusions of the report were adopted by the Academy.

Galvanic Forceps.—These forceps are made by Gorck, the instrument maker, by order of Dr. Kilian, only to see what might be their effect upon the uterus. The blades are made of copper and zinc, and the metals are properly isolated from the hand of the accoucher. The first experiment with the galvanic forceps was made upon a woman aged 27, of dry constitution, choleric temperament, and jaundiced

complexion. The application of the forceps was decidedly indicated in this case. The head of the child, which was in the first position, remained fixed at the lower aperture of the pelvis; and the torpidity of the uterus was so great, that the child had not moved for two hours and a half; while the infiltration of the scalp was of the size of a man's fist. Before applying the forceps, Dr. Kilian had the patient bled to fourteen ounces; but this had no influence on the action of the uterus. The blades were easily introduced into the uterus; but the moment they were joined, the woman had a fresh pains which was very violent, without being unbearable. At the same time a movement was felt in the whole uterus, which became as hard as a stone, and lost the morbid sensibility which it had shown before on each examination.

This state of things continued from the beginning to the end of the application of the forceps, and in spite of the hardness of the uterus the pains had no expulsive power. Nothing, however, indicated any spasm of the internal sexual system. After four actions with the forceps, the head cleared the lower aperture of the pelvis, and then (as well as before), the femoral muscles underwent a spasm and trembling of an unprecedented kind. Dr. Kilian then removed his hands from the instrument, to see if the uterus, which was still contracted, would not complete the expulsion of the child's head; but this was not the case, so that he was obliged to continue the use of the forceps.

The infant immediately breathed, which was surprising, when we consider how long it had been fixed in the lower aperture of the pelvis. Hardly were the shoulders free, when the child, which was very strong, began to cry, and the pulsation of the cord immediately ceased. The uterus then contracted, and in five minutes the placenta was in the vagina. There were no pains after delivery, and the lying-in was quite regular.

N. Y. Lancet from *Gazette des Hôpitaux.*

Nursery treatment of Infants, submitted to Prince Albert. By Joshua Waddington, M. R. C. S., consulting Surgeon of the Royal Sea-Bathing Infantry.—No other kind of milk to be given to an infant in addition to the milk of the mother or wet-nurse.

The less rocking the better.

When asleep to be laid upon its *right* side.

The best food is "Lemann's biscuit-powder," soaked for 12 hours in cold spring water, then *boiled* for half an hour, not simmered, or it will turn sour. Very little sugar to be added to the food, and then only at the time *when given.*

Sweets of every kind, are most injurious, producing acidity, flatulency, and indigestion, sores in the mouth, and disordered secretions.

An infant will take medicine the more readily if made lukewarm in a cup placed in hot-water, adding a very little sugar *when taken.*

The warm-bath (at ninety-four degrees of heat, *not less,* for *ten* minutes, every other night) is a valuable remedy in many cases of habitual sickness or constipation.

"Soothing syrup," sedatives, and anodynes, of every kind, are most prejudicial. They stop the secretions. A very small dose of laudanum given to an infant may produce coma and death.

When an infant is weaned, which is generally advisable at the age of nine months, it is of the utmost importance that it be fed with the milk of *one cow,* and *one only,* (a milch-cow), mixed with "Lemann's biscuit powder" (prepared as before directed) and *very little sugar.*

Boiled bread-pudding forms a light and nutritious dinner, made with stale bread, hot milk, an egg, and very little sugar.

When an infant is twelve months of age, bread and milk should be given every night and morning: stale bread toasted, soaked in a little hot-water, and then the milk (of *one cow*) added *cold.*

Solid meat is not generally required until an infant is fifteen months of age, and then to be given sparingly, and cut very fine. Roasted mutton, or broiled mutton-chop (without fat), is the best meat; next to that, tender *lean* beef or lamb; then fowl, which is better than chicken; no pork or veal; no pastry; no cheese; *the less butter the better.*

An infant should not be put upon its feet soon, especially while *teething,* or *indisposed.*

Avoid over-feeding at all times, more particularly when *teething.* It is very likely to produce indigestion and disordered secretions, the usual *primary causes* of convulsions, various eruptive complaints, and inflammatory affections of the head, throat, and chest.

London Lancet, December 24, 1842.

New Process for Anatomical Injections.—In a letter addressed to the Academy of Sciences, Paris, July 11, 1841, Doyere gives the following account:—I have employed, for nearly two years, a very simple process for obtaining fine injections. This process, which I believe likely to render some service to the anatomy of structure, and probably also to pathological anatomy, essentially consists in causing to enter in the same vessels, *within a certain interval of time*, two finely filtered saline solutions, which, by double decomposition, give an abundant and opaque precipitate. This succession of two injections is that which distinguishes my process from many others tried without success to obtain the injection of the capillary system by the same principle. I inject the second solution, as soon as the first has passed from the arterial system into the venous and lymphatic systems.

I have tried on animals a great number of insoluble salts, with a view to determine those which would give the most satisfactory results. I prefer to all others the chromate of lead. I first inject the chromate of potass, and am convinced that the order of injection is a point not to be neglected. A blue colour may be obtained by the precipitation of Prussian blue; brilliant red by iodide of mercury; white by the carbonate or sulphate of lead. The first has better succeeded with me than the carbonates and sulphates of lime and baryta.

The advantages which this process appears to me to possess over those in use, are above all to shorten the process of making fine injections, and to supersede any other preparation. It may be used with equal advantage cold or hot, in general or partial injection; the materials employed are unalterable, and may be consequently always ready. I will add, that the most minute injections required only a pressure which was evidently less than that of the heart's action. Poiseuille, to whom I made the process known several months since, in order that he might make use of it in his particular researches, has constructed an instrument by the assistance of which he can inject either liquid with that degree of pressure he considers proper.

By the assistance of this process, I have more than once succeeded in injecting by the femoral artery in a single operation, and in a few minutes, the capillaries of the muscular system in an entire animal, the adipose and cellular systems of the white and gray matter of the brain, of the conjunctiva, of all the mucous membranes, intestinal villosities, &c. The capillaries thus injected by the chromate of lead are

more filled, especially after drying, than by the injections of size, but less than by those of varnish (*vernis*); there also remains some doubt in my mind relative to the actual diameter of the latter canals. Those which run parallel to each primitive muscular fasciculus, to the number of four or six, appeared to me to possess, in the dog, $\frac{1}{400}$th or $\frac{1}{300}$ of a millimetre; but it is possible that their dimensions had been reduced by the action of one or the other of the two solutions employed, or that they had not been sufficiently filled. I am now engaged in determining the relation which exists between the size of injected vessels, and their size during life.—*Microscopic Journal* from *Comptes Rendus*, July 1841.

Syphilitic Retraction of the Muscles.—This is a disease of rare occurrence, and which has only of late received attention. It affects most frequently the flexor muscles of the fore-arm, if we may be allowed to form an opinion from the generality of cases observed at the venereal hospital, under Ricord. The three patients who presented this remarkable affection had arrived at that point of constitutional infection characterized by the symptoms which are denominated tertiary by Ricord. In all these the retraction was very similar; the flexors of the fore-arm being affected by it. The muscles appeared shortened, as a result of the permanent contraction, which did not permit the extension of the fore-arm; but their tissue, though firm, presented no appreciable alteration. An important symptom was the peculiar pain which existed in the contracted part; this pain was increased at night, and resembled closely that experienced in syphilitic affections of the bones. In one of the patients the retraction was cotemporary with tertiary ulcerations of the throat; in another, with periostitis of the tibia. These patients were submitted to the treatment of iodide of potassium. The success, under its influence, was as prompt and easily obtained as in other tertiary symptoms. The pains ceased in each one as soon as the fifth or sixth day. The movements of the limbs underwent a progressive amelioration, and were soon perfectly restored.—*Lond. Med. Gaz.*, July, 1842, from *Bull. de Thérapeut.*

Prevention of Lead Colic.—Mr. Benson, the managing director at the British white lead works, Birmingham, says that the use of what he calls sulphuric beer by the workmen is an effectual preventive of the colic arising from the effects of the lead, and which, previously to the employment of the sulphuric beer, was exceedingly prevalent among the men. He was induced to try it from a statement made some time since, that sulphuric lemonade had been successfully used at a white-lead manufactory in France. Its action must be effected by the chemical transformation of the poisonous carbonate into the innocuous sulphate of lead. The formula for the preparation of the beer is as follows;—Take of treacle, fifteen pounds; bruised ginger, half a pound; water, twelve gallons yeast, one quart; bicarbonate of soda, one ounce and a half sulphuric acid, one ounce and a half by weight. Boil the ginger in two gallons of water; add the treacle and the remainder of the water hot. When nearly cold, transfer it to a cask, add the yeast, to cause fermentation. When this has nearly ceased, add the sulphuric acid, previously diluted with eight times its quantity of water, and then the bicarbonate of soda, dissolved in a quart of water. Close up the cask, and in three or four days the beer will be fit for use. As acetous fermentation speedily takes place, particularly in hot weather, new supplies should be prepared as required. The object in adding the bicarbonate of soda is to give a pleasant briskness to the beverage. The sulphuric acid remains greatly in excess.—*Lancet*, Dec. 17, 1842.

Robertson on the Cause of Caries of the Teeth.—Prior to the appearance of the first edition of Mr. Robertson's treatise, in 1835, the prevailing opinions concerning caries of the teeth were those of Fox and Bell; the former maintaining that the disease consists in an inflammation of the bony substance of the crown of a tooth, which secondarily affects the lining membrane of the organ, causing its separation, and a consequent decomposition of the solid parts; the latter insisting that caries commences in inflammation of the bone immediately under the enamel, from which, he says, the tooth, owing to its imperfect vitalization, cannot recover, and death and decay are the consequence.

Mr. Robertson, on the other hand, maintains that the remote cause of destruction of the teeth is the decomposition of food which lodges in the interstices between them.

The inflammatory theory, then, is to the effect that the teeth decompose by vital action, commencing in their interior, and proceeding to their surface. Our author's theory is exactly the opposite, namely, that decay begins by chemical action upon the surfaces of the teeth, and proceeds to their interior, and that inflammation is the consequence, and not the cause, of caries. His arguments are chiefly derived from the fact, that the teeth decay only in such situations as are favorable for the lodgment and decomposition of food, and never upon their smooth and even surfaces; from their decaying in pairs, and at particular periods of life; from the ready relief which filling and filing afford, if decay be not too far advanced; from the disease commencing externally and proceeding inwards, and never conversely; and from the circumstance, that artificial teeth are liable to the same species of destruction as natural ones.

These arguments we apprehend to be perfectly sound, and in accordance with the rules of common sense and experience; for we cannot imagine a disease, which owes its origin and progress to inflammation, to be susceptible of alteration or cure by means which, of all others, are most calculated to contribute to such action. But when the cause is purely chemical, and owing primarily to a defect of structure, it is not irrational to suppose that mechanical treatment will arrest or remedy it. It is on this ground that we think the practical application of Mr. Robertson's theory particularly valuable. Believing, as he does, that inflammation is not the cause of caries, but the consequence of it, and dependent upon the influence of atmospheric and other agencies upon the lining membrane of a tooth, he urges the necessity of removing any decay that may be apparent, *before the occurrence of pain;* for after its commencement there is little hope of permanent remedy. He insists upon the propriety of constantly using a tooth-brush, so that any particles of decomposing food may be removed; and of an occasional inspection of the teeth by a dentist, that any lurking decay may be arrested. He tells us that these suggestions have wrought a considerable change in his own practice—that people now apply to have caries arrested, rather than to have teeth removed in consequence of its ravages; and he maintains that, if this plan were universally acted upon, tooth-ache would be comparatively unknown, and the organs would be preserved in beauty and usefulness to the remotest period of life.—*Med. Ex.*, from *London Med. Gaz.*, Dec. 9, 1842.

Iodide of Potassium in Atonic Ulcers.—The utility of the hydriodate of potass in secondary syphilis is pretty generally acknowledged. Lisfranc has employed it with success in ulcers of long standing, which have resisted other modes of treatment. A man, sixty-eight years of age, was admitted under his care at the Hôpital de la Pitie, who had for eight years had two obstinate atonic ulcers on his left leg; one of which, five inches in length, extended round the limb for more than half of its circumference; the other was about two inches in diameter. The only topical application used was simple cerate and charpie, but Lisfranc prescribed a scruple of the iodide of potassium daily, which quantity he subsequently increased to six grains every six hours. At the end of six weeks the health of the patient had become greatly improved; his flesh generally had acquired firmness; his face was ruddy; and he had even gained fat. The smaller of the two ulcers had completely disappeared in twenty-five days, and scarcely one-tenth of the larger ulcer remained to be healed. In two months the man left the hospital perfectly cured.—*London Lancet*, Jan. 7, 1843.

Medical Topography of La Plata.—We are indebted for the following account to a review in the Gazette des Hôpitaux, of a pamphlet by Adolphus Brunel, surgeon-major to the corvette La Perle. It is entitled 'Topographical, meteorological, and medical observations made in Rio de la Plata, during the blockade of Buenos Ayres.'

The Rio de la Plata is a great mass of water lying between the 34th and 36th degree of south latitude, which after having received the Parana, the Paraguay, and the Rio-Salado, falls into the Atlantic. Two considerable towns, Buenos Ayres and Monte Video, the capitals of the Argentine and the Eastern Republics, are situated, one on its right, and the other on its left bank. Its shores are pleasantly situated, with a temperate climate, and a very fertile soil. The spring begins in September, the summer in December, and the autumn in March. During the author's stay, the greatest cold was 4+0 of Reaumur,=41° of Fahr; and the greatest heat 24° R.=86 F. The most frequent winds are from the N., the N.E., and the S.E.; they blow with violence, often change, and produce sudden and frequent alterations in the temperature and hygrometric state of the atmosphere.

The people who inhabit these countries may be divided into four principal classes.

First, the Creoles, sprung from the conquerors, to whom may be added all the Europeans and North Americans. Secondly, the Negroes imported from the coast of Africa. Thirdly, the half-castes, formed by the intermixture of Europeans, natives, and negroes. Fourthly, the natives, who may be divided into two classes; those, namely, who have become civilized, and those who, resisting every attempt of the Spaniards to subjugate them, have preserved their independence.

The Indians in the savage state inhabit the Pampas, and the deserts of the great Chaco; and they are divided into tribes of eighty or a hundred families, governed by a chief, who is generally elected. Since the importation of cattle, and particularly of horses, into America, those tribes are no longer cannibals. These Indians are below the middle stature; their head is large, their nose short and flat, and their cheek-bones prominent. The projection of the chin is wide, and the chin itself is the only part of the face that has hair; their lips are thin, and their mouth furnished with splendid teeth, which are admirably regular, and remain uninjured to an advanced age. Their chest is broad and prominent, and their limbs well turned; their hands and feet small; their complexion of a pale copper color; their long black hair meets at the top of the head, and they sometimes let it hang down; their hearing is very fine, and their sight piercing; their constitution is robust, they are bold riders, and never go but on horseback. They are distrustful, thievish, greedy, and cruel; drunkenness is their ruling passion; they are naturally lazy, and oppress their women with work. Their chief nourishment consists of horse-flesh, which they eat almost raw, and when it has reached a certain degree of putrefaction; at other times they dry the meat, and reduce it to a powder, mix it with plenty of salt, and make it into a paste. They use maize as food, and also make a fermented drink from it. The coagulated blood of a colt, kneaded with maize flour and salt, is one of their tit-bits. At present, the incursions of these savages into the different provinces of La Plata are less frequent than formerly; yet from time to time they plunder the farms and carry off the cattle. They make war with ferocity, massacreing the men, and sparing only the women, and sometimes the children.

This part of America is exempt from the morbid scourges which devastate other countries. The plague of the East, the yellow fever of the Antilles, the cholera, typhus, and

intermittent fevers, are not seen there. Among common diseases are catarrhs, sore throats, croup, hooping-cough, pleurisy, and pneumonia, all connected with the rapid variations of temperature. Phthisis is also very destructive there. Diseases of the skin are very frequent; small-pox, measles, and scarlatina, are dominant epidemics. Caries of the teeth is endemic, and appears very early; girls, in particular, of sixteen or seventeen, have none but decayed teeth. The ravages of small-pox are frightful, especially among the native savages, whole tribes of whom it has often destroyed. The slightest wound, and frequently the mere transition from heat to cold, is sufficient to produce immediate tetanus. The negroes and Europeans are more usually attacked by it than natives. The *gauchos*, or half-caste shepherds, often succeed in treating this terrific disease by wrapping the patient in a sheep-skin recently flayed. Hepatitis and dysentery are common in the towns, and syphilitic diseases in the country. Goitre is endemic; and the negroes are subject to tubercular lepra.—*New York Lancet.*

The Chigoe, or Gigger. By Frederick Roberts, M. D., Assistant Surgeon of the 59th Regiment.—As medical authors give no account of the chigoe, which becomes so often parasitic to man, and a source of considerable annoyance to him in the West Indies, and as it has further been doubted to be an insect, the following short paper, containing the slender information that could be gathered from a few examinations of cases, respecting the habits, effects on the body of man, and treatment for its removal, is offered.

The "chigoe," or "chiego," of the West Indies, and the "pulex penetrans" of naturalists, consists of two species, the black and the white, in the natural history of which there appears to be no difference. The habitation of the "gigger," as it is likewise called, is in stables, kitchens, and on the ground in the open air in dry weather, which is the season it mostly prevails in—that is, from December to July. It attaches itself to the feet of those who walk about bare-footed, and those whose occupations are in kitchens, abounding in ashes and other filth. Holes in boots or shoes render one liable to be attacked by them. Its intrusions are not confined to the human species, but it is found to attach itself to cats, dogs, sheep, and still more to pigs.

The parts of the body it is found in are the soles of the feet

and toes, and occasionally the fingers. It insinuates itself beneath the skin, and there deposits its eggs in a nidus of a tough gelatinous substance. Attention is first drawn to the presence of these insects by a gentle itching, which, as the insect insinuates itself deeper, and the nidus begins to grow, becomes, in a few days, less tolerable. The nidus, containing longish-shaped white gelatinous eggs, is a cyst of a tough membrane, and arrives sometimes to the size of a pea before the eggs are hatched, after which the new being likewise insinuates itself into the skin; so that in those who neglect extracting them there are clusters, buried under the skin of the soles of the feet and toes, which raise it in little round eminences, and create irritable sores, oozing a serous fluid, and ultimately intractable ulcers—nay, the entire toe has been known to be lost by the creeping ulceration that is established. The black gigger differs so much in its effects from the white, to which, it has been said, it otherwise resembles, as to be called the poisonous gigger, and produces much more malignant sores. The treatment for the removal of the chigoe consists in extraction by means of a needle—an operation dexterously performed by the negroes, and free from pain.—*New York Lancet*, from *London Med. Gazette.*

On Contusions of Muscles.—By Wm. Allison.—The most interesting circumstance connected with contusions of muscles is the difficulty of distinguishing those injuries from dislocations or fractures of those bones which form cups for joints. Muscles are bruised by falls or blows; a limb is consequently stiff (whilst lenghtened or shortened), and it becomes motionless at a joint, so that neither flexion nor extension can be performed by the subject of the accident; and sometimes considerable swelling ensues before a medical man arrives. The surgeon's attempt to move the limb, in order to ascertain the nature of the injury, produces a painful spasmodic action of muscles, sometimes without proving advantageous to himself, in his endeavour to find out the precise cause of the loss of muscular action and the stiffness of the limb. And whilst the surgeon has no means of completely satisfying himself with respect to the accident, he is closely questioned by the patient and his friends, and must either express his doubts or give indirect answers. We all know that by sleeping with the head upon the arm, so as to make good pressure on the median nerve, we may become unable, during many minutes

after waking, to move the fore-arm; that by sleeping cross-legged in a chair, so as to make a firm pressure upon the popliteal nerve, we may be, during many minutes, unable to stand upon the leg; that rheumatic stiffness may require great muscular efforts to restore the use of the limbs; and that sometimes after fractures of the arm or thigh, one means only can overcome the muscular rigidity, and restore action—namely, the frequent, resolute efforts of the patient to put the muscles in action; but I think it behoves us especially to ascertain the different effects and the practical consequences of violent muscular contusions.

1. The muscle or muscles may be so bruised as to be simply benumbed (with tonic or permanent contraction or with relaxation), the nerves being affected by the fall or blow, something like the brain from concussion.

Case I.—Mr. Smith, of this town, remained with his leg, for half an hour, under a horse which had fallen with him, and which had then laid upon him, the horse having made fruitless attempts to get up whilst the leg was under him. Mr. Smith could not move his leg when first lifted up; but, being supported, he made great efforts to use it, until in ten or fifteen minutes he gradually became able to walk.

Case II.—A woman, named Parkin, of Ordsall, fell from a load of hay upon the hard ground, in a very hot, dry summer; her thigh was for some weeks in the exact position of a dislocation into the ischiatic notch. By forcible extension I could place the limb in the natural position without pain; but it always returned to the apparently dislocated position. No fracture of the acetabulum nor of the neck of the thigh-bone could be felt. In four or five weeks she recovered the use of the limb.

2. The muscles may be bruised whilst in action, and remain stiff (with atonic contraction or with relaxation) so long as they are left at rest; but the moment an attempt is made by the patient or surgeon to move the limb, a violent, painful quivering or irregular spasmodic action comes on, and the limb cannot be placed in the natural position.

Case III.—A boy was carrying two pails full of water suspended from his shoulders; in attempting to step down with them, from a very highly-raised causeway, he slipped backwards and sideways upon the edge of the causeway, shooting his heels before him. On my arrival his leg presented the appearance of a dislocation upon the pubis. Every attempt to bring that knee to a level with the other, either on a mattrass or when standing upon the sound limb, failed; but it

produced painful, spasmodic muscular action. The chief pain was in the groin, where there was a swelling; but as the head of the thigh-bone could not be felt there, I proclaimed the accident to be "a serious injury of the muscles," which probably would continue some weeks. By leeches, fomentations, &c., the boy recovered in a week.

3. Muscles may be bruised, with extravasation or some injury ending in suppuration.

Case IV.—I was called (July 1) to a lady who had been thrown out of a pony carriage in this town; her shoulder was dislocated, and her leg was bruised. Both before and after the dislocation was reduced she walked twenty or thirty yards very well, and she was sent home, a few miles off, in a chaise. The leg swelled, and became stiff and useless (to herself immovable). After leeches, fomentations, poultices, &c., had been used, with entire rest for upwards of five weeks, she became alarmingly ill, with high constitutional disturbance during her seventh month of pregnancy; and in about a week from that time (on the 17th of August) I opened a deep-seated abscess under the fascia of the gastrocnemius muscle, after which she became perfectly well, before her confinement (on the 17th of October), from which she recovered as usual.

4. Muscles may be bruised, with laceration of fibres.

Case V.—In June, 1839, I was desired to visit a stout, heavy, muscular man, who, it was supposed, had dislocated his hip. On my arrival I heard that, whilst sitting upon the shelvings of a cart, he fell backwards with his shoulders upon the wheel, and reached the ground (hard sand-rock) in about the sitting position. Moving the limb gave excruciating pain, and occasioned spasmodic muscular contraction; nevertheless, after having placed his shoulders and hips in a straight line upon a mattrass, and having grasped each ancle with one hand, I drew him downwards towards the bottom of the mattrass, when I found the inner ancle-bone of the injured side full an inch and a quarter below the other, with the heel inclining inwards. I could bend the knee upwards towards the abdomen, but could not cross one thigh over the other. Adduction could be effected with some difficulty; but this limb was always longer than the other by an inch and a quarter, with the knee separated, and the toes turned outwards when in the easiest position, and there was a constant pain in the perineum. If the case had been one of dislocation into the foramen ovale, I supposed adduction could not have been effected, and I was not aware that it could be any other variety of dislocation. There was no crepitus about the joint; I

therefore believed it to be lengthening of the limb, mentioned by the late Sir A. P. Cooper, and delivered my opinion decisively, "that there was not any dislocation." However, I felt much more satisfied after my partner had accompanied me on my next visit. To the question, "What *is* the accident?" we replied, "a rupture of some part of the muscle which forms the buttock."

The gentleman was bled in the arm, took an opiate, had his hip fomented, and warm, damp linen kept upon the painful part; he then took castor oil; on the following morning twelve leeches were applied, and afterwards poultices. We cannot lift patients so affected into and out of warm baths; he was kept in the easiest posture, &c., and the case went on quietly; but the lengthened state of the limb, the inability to move it without violent pain for some weeks, and the sensation of something in the perineum, gave rise to doubts amongst his friends respecting a dislocation. In this case extension of the rigid muscles after the second week, by pulleys applied as if for a dislocation into foramen ovale, until fainting was produced, appeared to be serviceable. The consequences of the accident were, not only that the limb gradually became of the same length as the other, but that contraction went on until it was about an inch shorter, as it remains to this day, that he halts in walking, and that he cannot ride on horse-back without making the hip and thigh muscles very painful. I have on several occasions seen limbs as rigid from falls and bruises, when all attempts at motion have given violent pain; but in this case I cannot account for the lengthening and subsequent shortening of the limb, but by a laceration of muscular fibres. He can now walk ten or fifteen miles in a day without fatigue.

In relating the foregoing cases, I may not have classed them correctly. For instance, the pregnant lady may have had some laceration of the deep-seated tissues of her leg, as the carriage wheel had evidently passed over it; but that being now doubtful, merely serves to show the difficulty of stating the precise extent of injury at the first visit after an accident.

A surgeon, called to reduce a dislocation, has to distinguish one from a fracture near the joint; and sometimes, in forming his diagnosis, he is perplexed by muscular rigidity; at other times by considerable tumefaction from extravasation of blood; and on some occasions by extreme tension from effusion, the consequence of inflammation. As the late Sir A. P. Cooper, when speaking of dislocation, said, "Few accidents are more likely to endanger the reputation of the sur-

geon, as the patient may become a living memorial of his ignorance." I shall not apologize either for having called the attention of surgeons in the commencement of their career to this particular part of their practice; or for reminding them further that the biceps tendon may be ruptured, or that it may be displaced from its natural situation in passing over the head of the os humeri.—*Amer. Journ.*, from *Prov. Med Journ.*, May 28, 1842.

We read the following article in the London Lancet, (Nov. 26, 1842):

A Population getting Shorter.—"In the department of Finisterre (Brittany), the use of ardent spirits seems to increase, and to be attended with some peculiar effects on the population. In the two arrondissements of Quimper and Quimperlé, the spirituous liquors imported increased from 1,869 hectolitres in 1825, to 3,985 in 1839, and, corresponding with this increase, the average stature of young persons subject to military service is said to have diminished until it had become 22 millimetres (about an inch) less in 1838 than in 1818. A much greater number of individuals was also found unfit for service in the former than in the latter named year. Gin and camomile have long been in repute in England for stunting the growth of little dogs."

As a part of the general subject of Hygiene, and in connexion with the principles and practice which should govern and prevail in the temperance reform, we have had frequent occasion to correct the common, we might almost designate it vulgar, opinion of the temperance of the French, as regards the use of alcoholic liquors,—because, forsooth, France is a country of vines and of wine manufactory. In reference to the very province noticed in the above article, from the Lancet, we may refer our readers to a volume of ours published last year, "On Regimen and Longevity: Comprising Materia Alimentaria, Dietetic Usages, and the Influence of Civilization on Health and Duration of Life." pp. 420. 12mo.

At page 78 of this work we find the following: "It will surprise many of my readers, who cannot connect ideas of intemperance in the use of strong drinks, with the habits of Frenchmen of any class, to be told, on very competent authority (Perrier, of Brest, Preface of Foreign Appendix to Report from Commissioners on the Poor Laws, p. 68), in reference to the people of Brittany: 'The principal cause of

misery is inebriety: its frequency among the lower orders keeps them in poverty. The "cabaret" (wine and brandy shops) absorb a great portion of their earnings. This vice is not confined to men; the women partake of it. It has decreased within the last five years, but is still (1834) considerable.' The favorable prospect held out in this last sentence does not, however, seem to have been realised.

"I shall refer again to this dark feature of French dietetic regimen, in connexion with health, when I speak of grapes and their fermented juice or wine, and also in a subsequent chapter upon drinks. It will then be shown, by statistical documents of French preparation, that the people of France, in the use of wine, cider, beer, and brandy, for drink, consume in this way, per individual, more than the people of Great Britain and Ireland, per individual. The evils growing out of the immense indulgence in alcoholic drinks, in the impoverishment, diseases, and demoralization of the French people, will also be exhibited, by reference to the communications and reports of their own physicians, statists, and philanthropists." p. 80.—*Bulletin of Med. Science*, Feb. 1843.

Case of Abscess in the Walls of the Uterus, communicating with the Rectum.—Related at the Westminster Medical Society, December 3, 1842, by Dr. Frederic Bird.—Mrs. G., aged 37, had, previously to the last three years, enjoyed general good health, menstruating regularly. At this date she married, and was soon afterwards attacked with acute deep-seated pain in the hypogastric region, radiating to all parts of the pelvis, and increased by micturition and defecation. These symptoms were associated with general constitutional disturbance, and, in fact, with all the ordinary symptoms of inflammation affecting the uterus. She passed through the usual forms of treatment, and although the more urgent symptoms were mitigated, yet she continued to suffer during the three following months from occasional pain in the region of the uterus, always produced by attempts at expelling the contents of the bladder or rectum, the discharge of fæces being also sometimes effected with great difficulty. An internal examination made at this period detected the uterus lower in the vagina than usual; there existed marked enlargement of that organ, the chief increase in size being found to occupy the posterior wall; the os and cervix uteri were painful to the touch and tumid.

Shortly after the vaginal examination had been made, about half an ounce of pus suddenly escaped from the rectum, and she experienced immediate relief from her former symptoms. She now became the subject of diarrhœa, generally passing from six to eight evacuations daily, each of which contained more or less purulent matter; pain in micturition was no longer felt, but she invariably suffered greatly when passing motions. The diarrhœa could not be arrested by any of the remedies employed; her general health, nevertheless, slowly improved, and she went into the country, where she remained during the succeeding two years, little or no variation in her symptoms having occurred. The diarrhœa, and with it the discharge of pus from the rectum, continued; on some occasions more than a pint of pus has been thus evacuated during twenty-four hours, and she observed that whenever the pus failed to be discharged so freely as usual the local pain became aggravated. During the whole of this period menstruation had been very irregular, generally occurring at intervals of eight or nine days, accompanied by much lumbar pain and the passage of coagula.

After the lapse of the time mentioned, she again applied to Dr. Bird, suffering from nearly all her previous symptoms, and, in addition to them, profuse menorrhagia; the pain in the region of the uterus was extremely acute, increased by the passage of the fæces and by pressure on the lower part of the abdomen, to which became added a neuralgic condition of the genital organs, the slightest pressure upon which produced extreme suffering; so great was the pain thus excited that she was accustomed to employ a mechanical contrivance to prevent the bedclothes from touching the pubes. A vaginal examination was, with much difficulty and pain, again made; the uterus was found to be nearly in the same state as before, excepting that it had become quite immoveable, appearing as if impacted in the pelvis, just as may be observed in some forms of malignant disease affecting that organ. No benefit resulted from medical treatment, occasional relief only being afforded by large doses of opium and the external application of belladonna.

She continued to suffer from frequent discharges of blood from the vagina, and from all her former symptoms, until the lapse of six weeks, when she sank exhausted by the extreme suffering produced by her disease.

A post-mortem examination was made twenty-four hours after death. On laying open the abdomen, the omentum, small intestines, and all the pelvic viscera, were found agglu-

tinated together by peritoneal adhesions of old date. On raising the uterus it was seen to be firmly attached by its upper and posterior portion to the rectum; it presented an irregular form, having the fundus enlarged to about thrice its natural size. A longitudinal section showed this enlargement to have been produced by an abscess seated in the substance of the wall of the fundus uteri, the cavity of which contained about an ounce of dark thick pus; the walls of the abscess varied in thickness from one to three-quarters of an inch, the thinnest portion being nearest to the cavity of the uterus. A communication by means of a short sinus could be traced from the cavity of the abscess to the adherent portion of the rectum, and opening into that intestine by an aperture sufficiently large to admit of the passage of a thick probe, and evidently of old formation. No communication existed between the uterine cavity and that of the abscess. The os and cervix presented no evidence of malignant disease. The Fallopian tubes and ovaries were adherent to the uterus, and could with difficulty be distinguished. The uterus had never been impregnated.

He (Dr. B.) had been induced to bring the case before the notice of the society chiefly from the rarity of such forms of disease; very few cases had as yet been described, and those which he had hitherto met with in the works of Madam Boivin and others were complicated with carcinoma or other malignant disease of the uterus. In the instance he had related no evidence of such disease existed, but it was clearly a case of inflammation of the substance of the uterus terminating in the formation of abscess. It was difficult to account for the neuralgic state of the generative organs, unless the immoveable and apparently impacted condition of the uterus might be received as sufficient to produce such an effect by mechanically pressing upon the surrounding nerves, an idea favored by the fact that at the earlier period of the case, when the uterus was not thus fixed, the pain was limited to that viscus and did not extend to the external organs.

*** The preparation was exhibited to the society, where Dr. Chowne stated that he had never seen a similar case. The uterus and its appendages, he said, were in that conglomerated state which is usually observed in women who had led an irregular life, and which was, probably, in them, dependent upon early and excessive excitement. This adhesion of the ovaries, Fallopian tubes, &c., in prostitutes, had been noticed also in France. Perhaps, he added, in Dr. Bird's case, this condition might have been the result of the disease under

which the patient labored. On the same occasion another member of the society, Dr. Reid, said that he also was unacquainted with the record of any similar case, excepting those related by Madame Boivin, and thought the disease must be a remarkably rare one.—*Lond. Lan.*, Jan. 28, 1843.

Tuberculous Disease of the Spinal Marrow.—Dr. J. B. S. Jackson exhibited a specimen of the above disease. It was situated at the sixth cervical vertebra, and involved almost the entire substance of the organ at that part, forming an opaque, yellowish, solid, well-defined and uniform mass about as large as the tip of the little finger. The spinal marrow was somewhat enlarged at the seat of disease, and was a little softened just above and below it, but was elsewhere quite healthy. The membranes, also, were healthy, except for some thickening of the dura mater at the upper part. In the brain there was a copious effusion of serum, with complete softening of the septum. Extensive tuberculous disease was found in both lungs and in the intestines, besides similar disease in the prostate gland and in the kidneys.

The patient, an Irish laborer, æt. 42, died September 25th. Health quite good previously to the last year, and since then no local trouble except a disease in the ankle joint. The symptoms of spinal disease came on about three and a half months before death, and, when examined on the 13th of August, were as follows: diminished sensation, with hardly a trace of voluntary motion in the lower extremities, the upper being very much less affected; very frequent and involuntary contractions of the right lower extremity, tending to draw the limb up into a strongly flexed position, and attended with very severe pain; some contractions of the left lower extremity, but without pain. Even on moving the bed clothes, the muscles of the lower extremities would be strongly excited, and, in attempting to straighten them when they were drawn up, his suffering was very great. In the upper extremities these spasms were very much less. The bladder was completely paralyzed, so that the catheter had been used daily for the last three weeks. These symptoms continued with but little change till death, the spasms being on one occasion so violent that the patient was fairly jerked out of bed, and fell upon the floor, though fortunately with but little injury. He suffered much also from a morbid sesibility, and from neuralgic pains in the right lower extremity, pass-

ing up into the abdomen. Respiration was carried on by the diaphragm, the intercostal muscles seeming to be completely paralyzed. The catheter was used till the last month, after which the urine became involuntary; the dejections, also, were for the most part involuntary, whenever procured, the bowels being very costive. The spine was often examined, but the patient scarcely ever allowed any pain or tenderness there, neither was there any trouble in the head worth mentioning. When first seen his general aspect was sufficiently well, but as the disease advanced, he became exceedingly emaciated, and for sometime before death was very much sunken, with sloughs about the sacrum. As to his pulmonary disease, he had no symptoms that led to a suspicion of it; these was occasionally some dyspnœa, but, as it was generally accompanied with a feeling as of a cord about the lower part of the chest, it was attributed to the paralysis; the nurse, on being questioned after the death of the patient, mentioned an occasional, very slight cough during the last few days, but never before.—*Rep. of Bost. Soc. for Med. Improvement*, Sept. 26th, 1842, in *N. E. Quarterly.*

Latent Insanity.—In many cases the experienced eye of the medical practitioner may be able to detect the existence of latent insanity. In such instances the patient evinces no evident indication of any irregularity of mind. His dearest friends and constant companions can perceive no alteration in manner sufficient to excite a suspicion of insanity. Occasionally the patient may manifest a strangeness and oddity of conduct, which is, however, but little noticed. The individual may, notwithstanding, be suffering from incipient symptoms of derangement. He has not altogether lost all power of controlling his feelings or ideas; an internal struggle may be going on between what he knows to be a fact, and the false conceptions which almost like an avalanche are forcing themselves upon his mind. None but those who have gone through this dreadful ordeal can form an accurate notion of the mental agony which a person so unhappily situated experiences! Dr. Darwin relates the case of a most elegant lady who suddenly became melancholy. She retained, however, so great a command over herself, that she was enabled to do the honors of her table with grace and apparent ease. After many days' entreaty, she informed her physician that she thought her marrying her husband had made

him unhappy (though it was a love-match on both sides), and that this idea she could not efface from her mind, day or night. It is astonishing for what a length of time a patient under such circumstances will struggle against a delusion which is endeavoring to fasten itself upon the mind. In such cases the patient gives no marked indication of mental unsoundness; she will attend to domestic duties, mix as usual with parties of pleasure, take her accustomed seat at the opera, and yet manifest no sign of the tempest raging within. How often do such patients confess to the medical practitioner, when the state of mind becomes so apparent as to compel the friends to summon relief, that for months they have been contending courageously against what they were conscious were erroneous perceptions. Hoping eventually to master these false ideas, they have concealed, from those in whom confidence ought to have been placed, their melancholy condition. This state of mind is fraught with much cerebral mischief. It cannot exist for any length of time without serious consequences ensuing.

F. Winslow's Health of Body and Mind.

Public Speaking.—One of the greatest errors committed by public speakers, when addressing large bodies of people, is speaking too fast. They forget that distance has the same effect upon sounds as it has upon architectural or other ornaments; it melts, as it were, the more minute parts into a confused mass. Elaborate and ornate passages in music cannot be appreciated by a moderately distant listener, while the bold and distinct slow movement can be felt and understood by him with ease.

THE WESTERN JOURNAL.

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TRAVELLING EDITORIALS.

Already do we repent of our rash resolve, to take up, at stated periods, the pen editorial; and if said determination had not been made public, we should forthwith repeal it. Doubtless the *public*, that is our readers, would without much persuasion consent to such a repeal; but who is to move in the matter? One party is likely to be too proud—the other two courteous, and there the matter must rest.

Removal of Dr. Barton to Cuba.

Two days after our arrival in New Orleans, Dr. E. H. Barton, formerly a Professor in the Medical College of Louisiana, and lately President of the Board of Health of the City, (both of which establishments he was mainly instrumental in effecting), departed for Havana. If not intending to expatriate himself, this gentleman, from circumstances in the health of his family, may sojourn there for some years, during which, we trust, he will make a thorough investigation of its fitness for our invalids in the winter. Dr. Barton's long practical acquaintance with the diseases of these climates, together with

his science and urbanity, must render him a valuable physician and friend to such of our invalids as may visit the island of Cuba.

Winter and Spring visits of Invalids to New Orleans.

It is difficult to understand why physicians will advise their patients with pulmonary disease to come into Louisiana in the winter, and early spring. Nothing in general could be more exceptionable. It is nearly a month since we entered the limits of this State, during which there have, it is true, been a few fair days, but with one exception they were too cold for the valetudinary. The dampness of the atmosphere through the months of February and March, is so great as to render it injurious to all who labor under pulmonary disease: and the exposures on a winter voyage, are such as no invalid ought to suffer. They who seek a milder climate, should do so in November, and continue in it till after the vernal equinox.

Winter Temperature of the Mississippi.

The surface temperature of the Mississippi, from the mouth of the Ohio to the Balize, we have found to be, during February, from 34° to 44° of Fah. Difference of latitude about 8°—general course of the river South. Thus a degree of latitude raises the heat of the river a degree and a quarter. But the effect is not wholly ascribable to change of climate, but likewise to change of altitude; though the influence of the latter must be less than that of the former, as it does not, probably, exceed two hundred and fifty feet; or about thirty feet to the degree of latitude. The discharge, for three months, of so great a volume of cold water into the Gulf, must exert an influence on its temperature, which might be ascertained by a sufficient number of observations. We have as yet had opportunity to make a few only. In the "S.W. pass," beyond the bar, and within the geographical limits of the Gulf, we found the turbid and saltless river-water to be 44°, while at the depth of between fifty and sixty feet, where the water was nearly transparent, and decidedly salt, the heat was 51°. On one side of the fresh water, where the appearance was somewhat turbid and the taste brackish, the heat was 53°, and a little beyond, in the green and salt water, it was 56° and 57°.

Medical College of Louisiana.

We have made one visit to this Institution. Beginning its session later in autumn than the other schools of the Union, on account of the occasional prevalence of yellow-fever in November, the lectures

continue through the month of March. We regret to say, however, that many of the pupils start home at the end of February. The number of the present session is, we understand, about thirty-five; which is an advance upon preceding years. They are principally from this State, Alabama, and Mississippi. The lectures are delivered in a rented house, but the Professors have begun the creation of a fund for the erection of an appropriate edifice. Neither the State nor the city has done any thing for the Institution. Its Professors are seven in number, who deliver from four to five lectures daily. The opportunities for practical anatomy are ample. The tickets of the Professors are twenty dollars each. It must be admitted that this school, in the number of its pupils, has fallen short of the expectations under which it was established; but we have not had an opportunity of investigating the causes which have retarded its growth; and which, it is to be hoped, may ere long be removed.

Death of Tiger-Tail.

In two visits to the New Orleans' barracks the head quarters of Brig. Gen. Arbuckle, we saw the Seminole Chief Tiger-Tail, on a sick bed. We were surprised to find him capable of conversing with us, but were told that before the war commenced, he had spent a year in the family of Gov. Duval, of Florida. At the times of our visits the captive warrior labored under a fever, with cough, and a leg more or less swollen and inflamed from accidental injury. By auscultating his naked and weather-beaten chest we heard, what perhaps but few had ever heard, the palpitations of his savage but patriotic heart. Gen. Arbuckle, and the skilful surgeon of the post, Dr. Randall, were anxious that he should receive the treatment which his case required; but he preferred his own physician, under whose incantations he expired a few days since. Since that time, his surrendered countrymen have been sent on to Fort Gibson.

New Orleans, March 10, 1843. D.

MEDICAL CONVENTION OF OHIO.

We would remind our readers that, according to adjournment, this body meets in Lancaster, Ohio, on the second Monday in May—the 8th day of the month. We anticipate an unusually interesting meeting, as at the last session, held in Cincinnati, and which we

had the pleasure of attending, many subjects of interest were referred to the coming one.

We acknowledge the reception of the "Proceedings" of the fifth (last) session of the convention, which multiplied engagements have hitherto prevented us from noticing. We observe that it contains two papers, one "On the Topagraphy and Diseases of Scioto County, Ohio," by Dr. G. S. B. Hempstead of Portsmouth; the other "On the Causes and Treatment of Milk-sickness," by Dr. John Dawson, of Greene County. The rule adopted by the "Censors" (in the absence of any definite instructions from the convention) cut off all the other papers placed in their hands. This rule seems to us in the main correct, as also do the suggestions made by this committee in reference to the proper objects of attention on the part of members of the convention. A few such papers as that of Dr. Hempstead, would give the body a character abroad, which volumes of wire-drawn speculations on old and trite subjects would never create for it. We shall refer to this paper hereafter. C.

ARTIFICIAL ANUS.

We will not pay our readers the poor compliment to suppose that they have *not* read the learned and valuable paper of Dr. Gross, on *Wounds of the Intestines*, which occupied so large a portion of the three previous numbers. They will, no doubt, be pleased to learn that we shall publish in the Journal for May or June, an article from the same pen on the nature and treatment of *Artificial Anus*. This will be in some sort an appendix to the paper just mentioned, and the two together will form one of the most complete monographs that we know. C.

LOUISVILLE MEDICAL INSTITUTE.

The published Catalogue of this Institution shows that there were one hundred and eighty-nine students in attendance during the past winter. Of these forty-six were from Kentucky, forty-six from Tennessee, twenty-eight from Mississippi, twenty-four from Alabama, thirteen from Ohio, twelve from Indiana, and the remainder from Louisiana, Georgia, the Carolinas, Virginia, Missouri, Illinois, Mich-

igan, &c., &c. There were thirty-seven graduates. The Honorary degree of Doctor of Medicine was conferred upon the following gentlemen: JOSIAH HIGGASON, Somerville, Tennessee; JOSEPH M. WOOD, Liberty, Missouri; RUFUS HAYMOND, Brookville, Indiana; JOSEPH R. BUCHANAN, Kentucky. C.

"MEUM AND TEUM."

Under the above head (which may or may not contain a typographical error) the *Medical News*, which seems to aspire to the respectable office of *tender* to the *American Journal of the Medical Sciences*, holds the following language:

"*Meum and Teum.*—We observe that the editors of the *Western Journal of Med. and Surgery* have done the editor of the *American Journal of the Medical Sciences* the honor to estimate several of the articles of his quarterly summary of sufficient value to be transferred to the pages of their Journal. They have considered the compliment of making use of his labours, however, sufficient, without thinking it necessary to make the acknowledgment which bare justice requires in such a case."

We freely acknowledge our indebtedness to the American Journal, as well as to other eastern periodicals, for foreign news, and the pages of this Journal will show that it has been our custom to make the usual "acknowledgment"—to a greater extent perhaps than some of our contemporaries, equally indebted as ourselves. There is scarcely a number of it that does not contain articles credited to the American Journal; and if such credit has been at any time improperly omitted, the editor of that Journal will, we are sure, do *us* the "justice" to believe that it was done inadvertently. We shall endeavor to avoid such omission in future.

The paragraph we have quoted strikes us as being tolerably *pert*, to come from one who, so far as we can see, has no interest whatever in the matter. It would be well for its author, perhaps, to polish both his manners and his Latin, ere he takes us to task again. We would also recommend him, in view of his disinterestedness on this occasion, *posthac in res suas diligenter incumbere*. We have couched this last in Latin, because, as he seems to have a fondness for the classics, it may thereby more readily attract his notice. Attention to these two suggestions may possibly keep him out of trouble. C.

QUADRUPEDS OF NORTH AMERICA.

John James Audubon, Esq., the distinguished author of the magnificent work on the birds of North America, is now engaged, in conjunction with his two sons, upon a similar work respecting the natural history of the viviparous quadrupeds of the same region. This work is already considerably advanced, having been in progress for several years. It is to consist of thirty numbers, several of which are already completed. Mr. Audubon recently passed through our city, accompanied by several scientific gentlemen, on his way to the Oregon Territory, where he expects to spend several months prosecuting his researches. We had the pleasure of meeting him during his sojourn here. He was in fine health and spirits, his step as elastic as in youth, and his form still unbent and his eye undimmed by the suns and snows that have blanched his head. We were gratified with a view of some of the drawings for the forthcoming work, and were startled by the vivid and life-like portraits of some of the more familiar quadrupeds. His pencil seems to have lost nothing of its wonderful power, and we can assure the lovers of science every where, that a rich treat is in preparation for them, such as Audubon alone could give.

We cannot but look upon Mr. Audubon as one of the most remarkable men of the age. To our intellectual vision he stands solitary and alone. We are writing this paragraph almost in the midst of the scenes of his early labors, where, filled with the design of the great work which has made him world-renowned, he was struggling against mountain-difficulties that one of less bold and daring genius would have deemed insurmountable. Such they seemed to those around—and so utterly chimerical did his project appear that he had to encounter not merely the sneers and scoffs of enemies, but the lukewarmness and the estrangement of friends. After long years of toil, of labors to which the fabled ones of Hercules were but as girlish pastimes, when he had well-nigh completed the vast undertaking that has rendered his name immortal, he was still regarded as one whom long sojourn amidst the unbroken solitudes of nature and infrequent visits to the haunts of men had unsettled, and was considered a fit mark for rude gibes and jests. When at length he bore about him the splendid fruits of his martyr-like devotion, when the winged and beautiful inhabitants of our vast forests seemed flitting

from spray to spray upon his canvass, or pouring forth their "wood-notes wild" along his enchanting page, obstacles seemed to thicken between him and the darling object of his life. Men heard and wondered—few believed. To publish was deemed the *ultima thule* of temerity. "My friends told me," said he, "to burn up my drawings and go home. I went abroad and the same advice was given me, "burn up your drawings and go home." But upborne by the divinity within, and true to its unerring instincts, he pressed forward, with the same iron will, the same indomitable energy, and lo! his name has gone abroad upon every wind—absolutely identified with the natural history of his native country!

Such a man does not appear in every age—it takes centuries to give birth to him. His whole history is full of interest. Not that it is singular; for it is the history of most great men. Such are seldom if ever appreciated in their early career by those immediately contemporaneous, which stamps them at once as the true nobility. Genius with its keen, sky-cleaving pinion ever holds its flight high above that of the multitude, and with far gaze pierces the future. C.

ANONYMOUS PAMPHLETEERS.

The Editor of the *Boston Medical and Surgical Journal* (March 15) speaks, in a tone of just indignation, of an anonymous pamphlet sent to him (from this city?) purporting to give "some account of the Faculty of the Louisville Medical Institute." He lashes its author or authors (for they are plural) to some purpose. Whether he has an inkling of whom he speaks, we do not know. He may rest assured, however, that he cannot say anything too severe of them. No epithets he could apply, would give any adequate idea of their cowardly meanness and malignity. Filthy and corrupt as they are, their sole gratification is in attempting to defile the good character of others. As with obscene birds, this occasional belching-forth of the putrid contents of their stomach is necessary we suppose to their own safety—the only other effect it has, is to make them a stench in the nostrils of all good men, and thus widen the circle around themselves. The publication of this pamphlet, cowardly and assassin-like as it is in the extreme, could scarcely add to their degra-

dation, unless in that depth there might be a lower deep. The fact that they are ashamed to acknowledge their own filthy and leprous off-spring, might be taken as an evidence of some remnant of good in their depraved nature, if we did not know them to be as dastardly as they are dishonest, as bankrupt in moral courage as in all else.

The secret of this matter can be told in a very few words. This pamphlet is composed of a number of scurrilous articles which appeared in one of the papers of this city, soon after the nefarious scheme to transfer the Medical Institute was defeated. These articles were concocted by the same knavish triumvirate who were so deeply engaged in that scheme, and who participated so actively in the publication of the infamous report made to the City Council on the subject. (See this Journal for September and October, 1842.) Of course, men who were base enough to sanction and give currency (as in that Report) to statements which *they knew to be false*, would have no scruples about uttering stale and oft-repeated slanders, such as are contained in this precious pamphlet, with the addition of whatever their own malice and devilish ingenuity could invent. What villainous act they will next be caught in, remains to be seen. C.

MEDICAL RESIGNATION.

Dr. N. Worcester has resigned the chair of *Physical Diagnosis and Pathological Anatomy* in the Medical College of Ohio. We regret to learn that the state of his health rendered this step necessary. The trustees of the college, as we are informed, have since abolished the chair. C.

NEW YORK LANCET.

The *New York Lancet*, which "blazed, the comet of a season," has comet-like "shot madly from its sphere"—in other words it is defunct. "We could have better spared a"—worse journal. "The rage (if such there be) for hebdomadals will be short lived—" what think you of that now, O wise son of Ballymena! "Moon-struck" quoth-a? C.